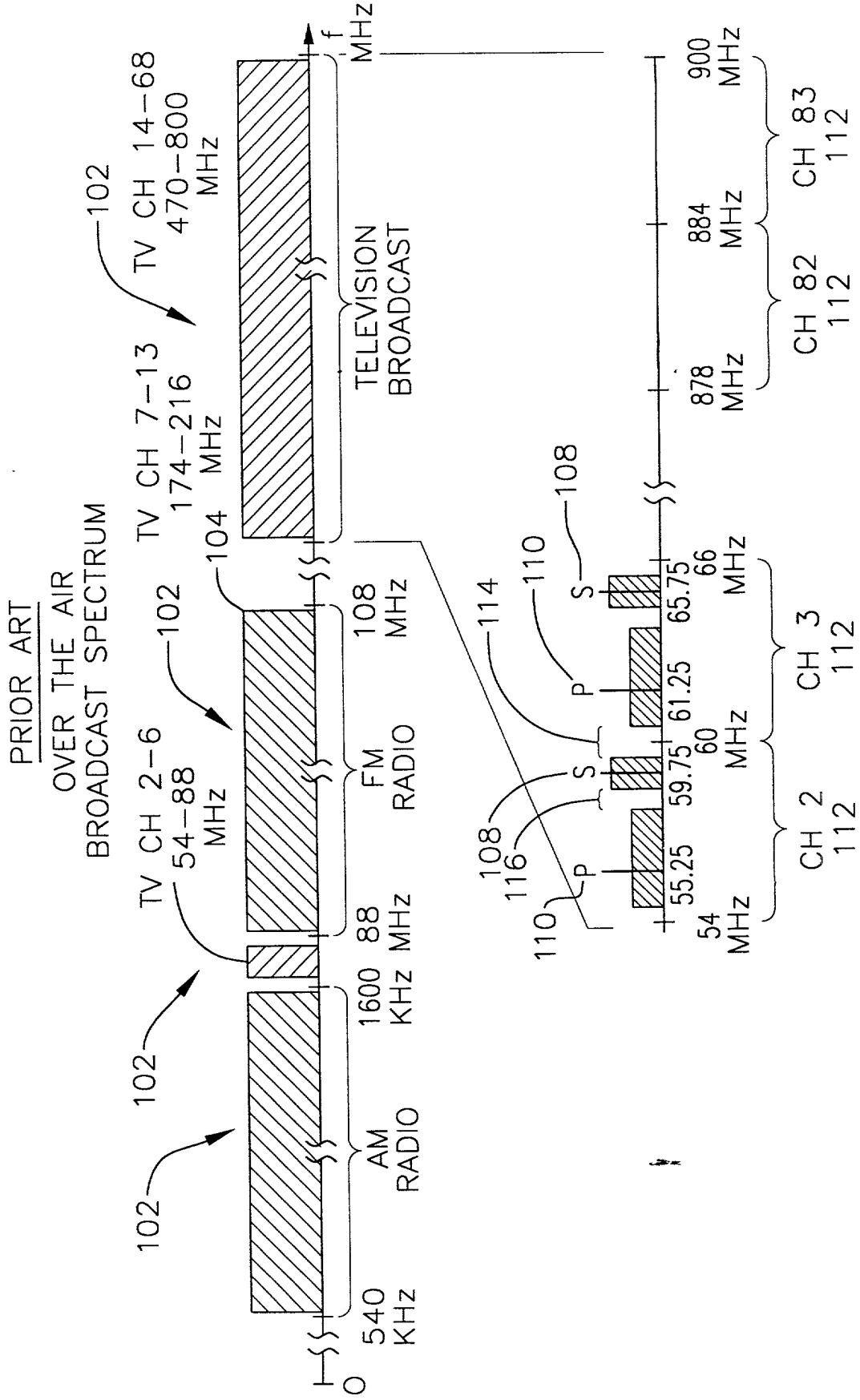
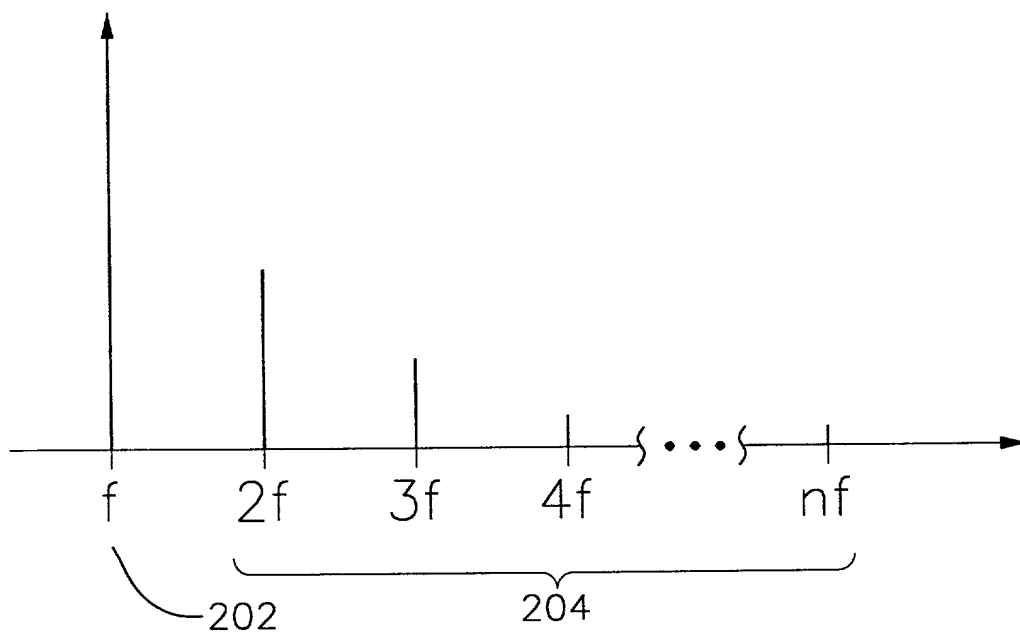


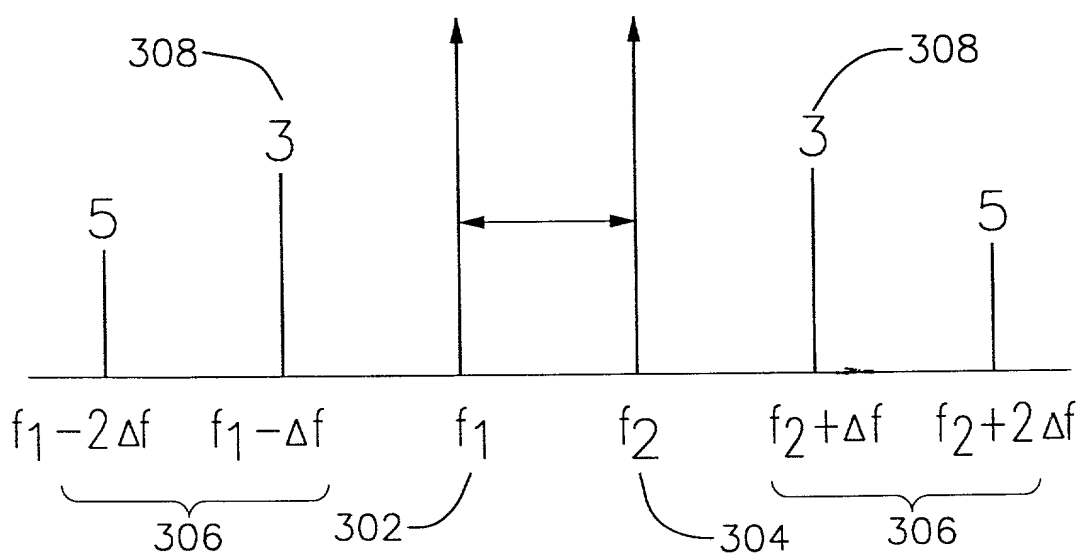
FIG. 1



**FIG. 2**



**FIG. 3**  
PRIOR ART



**FIG. 4**  
PRIOR ART

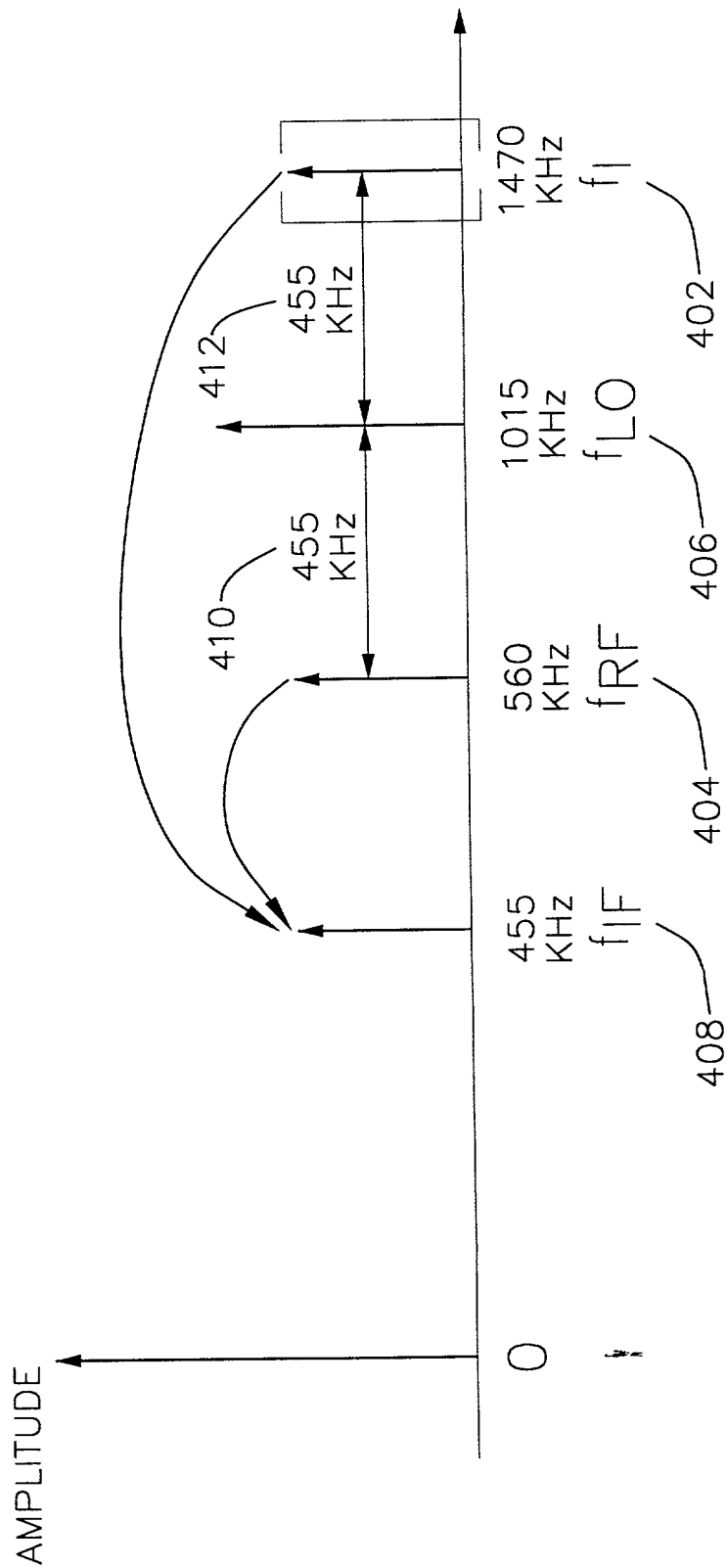


FIG. 5

DUAL CONVERSION RECEIVER

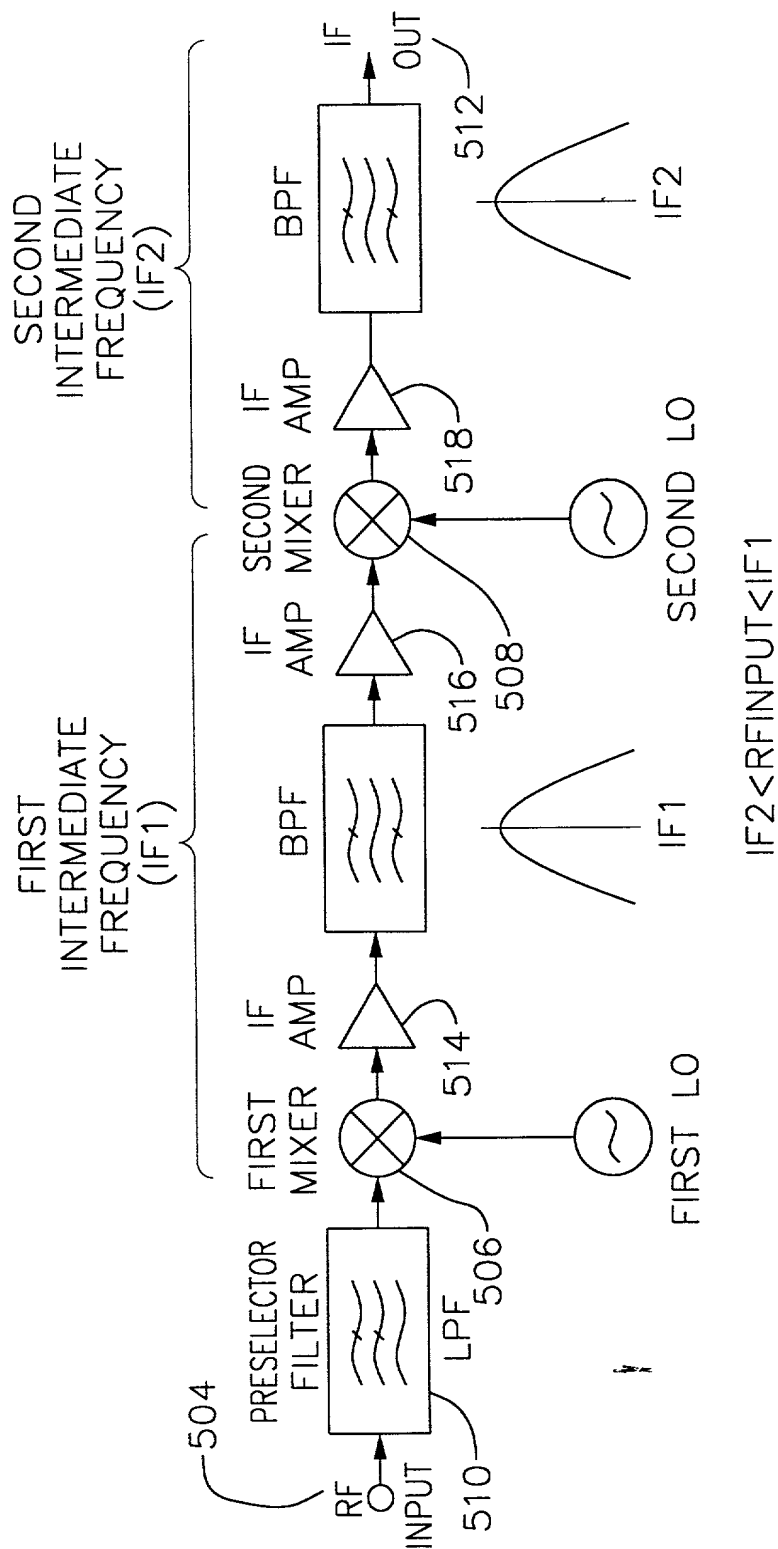


FIG. 6

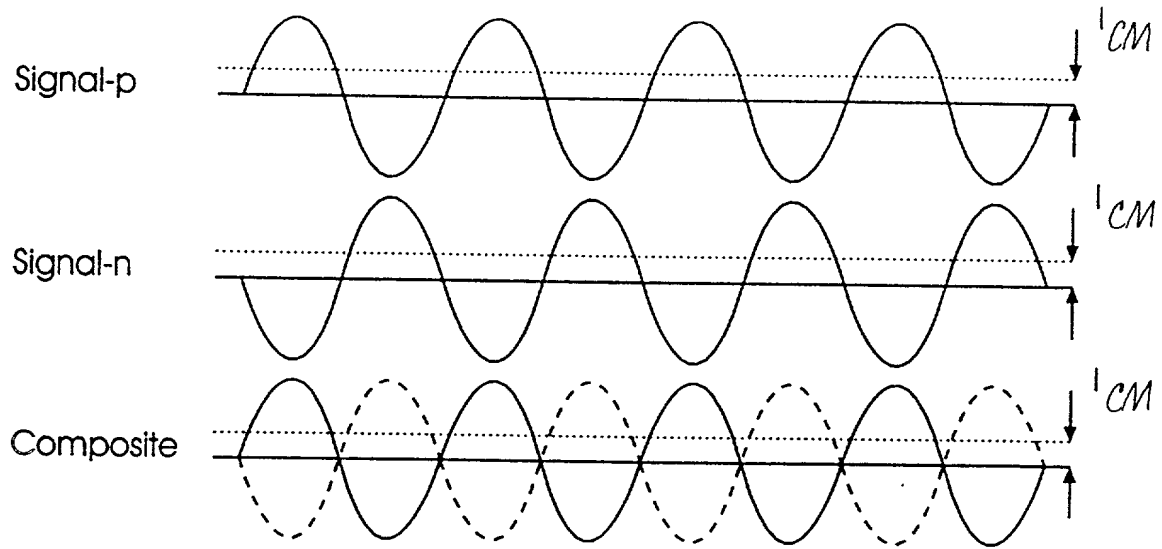


FIG. 7

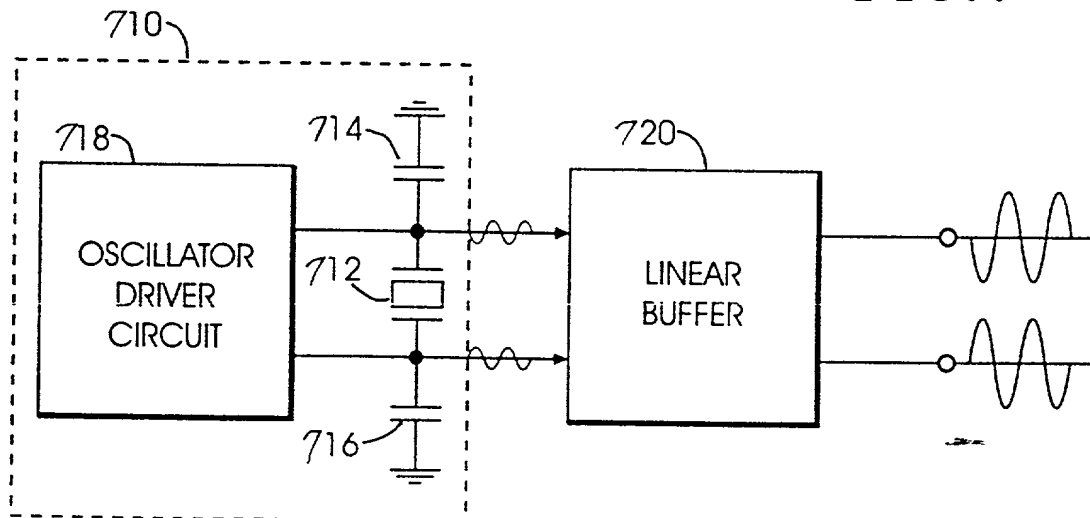


FIG. 8

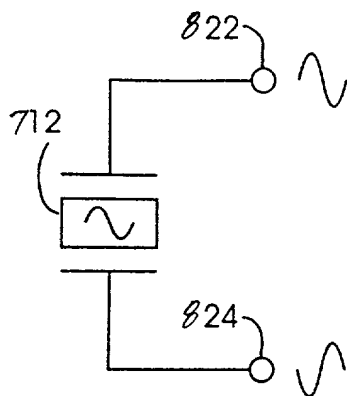


FIG. 9

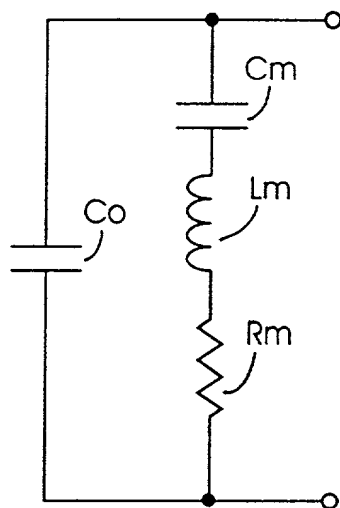


FIG. 10

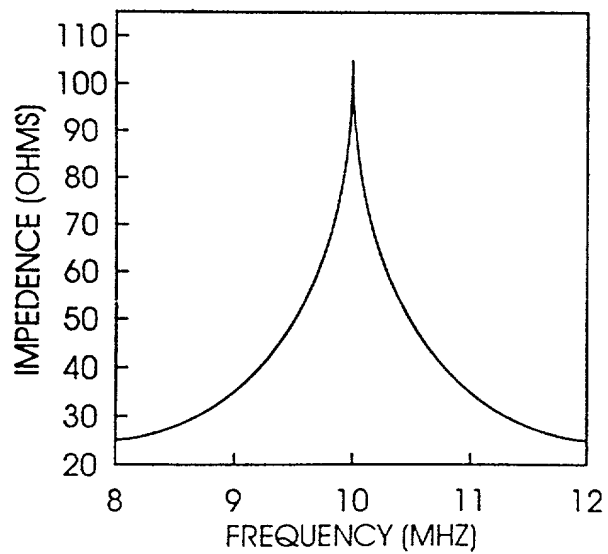
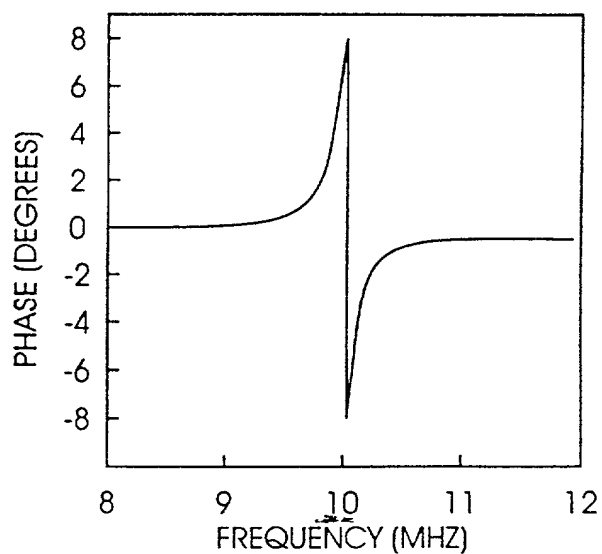
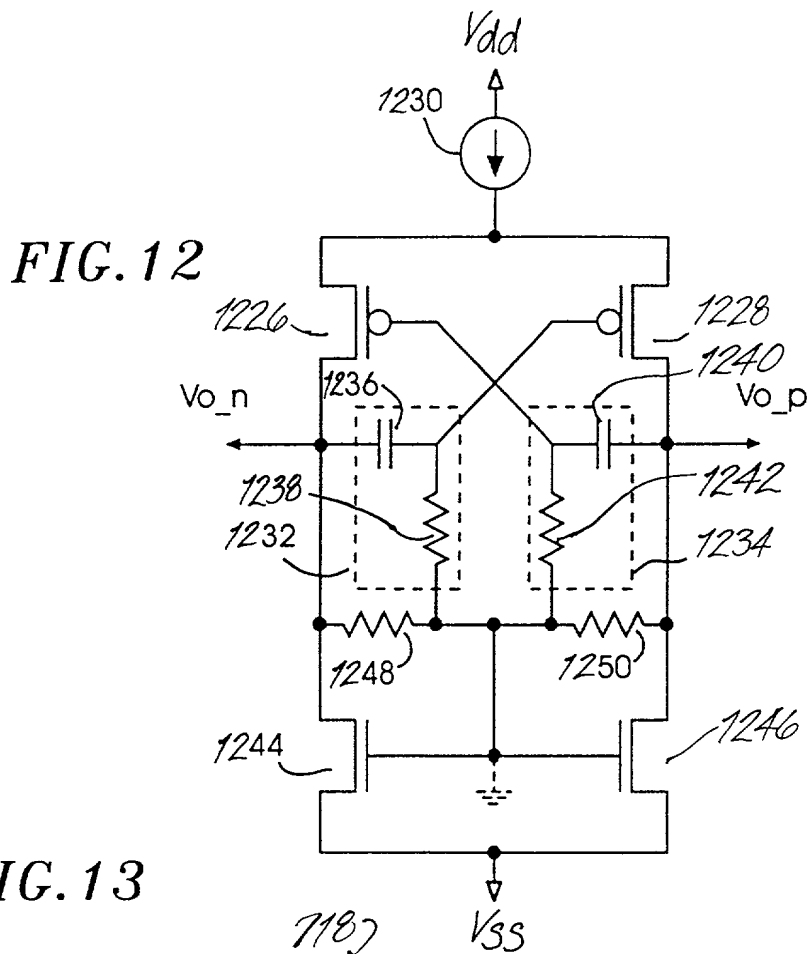


FIG. 11





**FIG. 13**

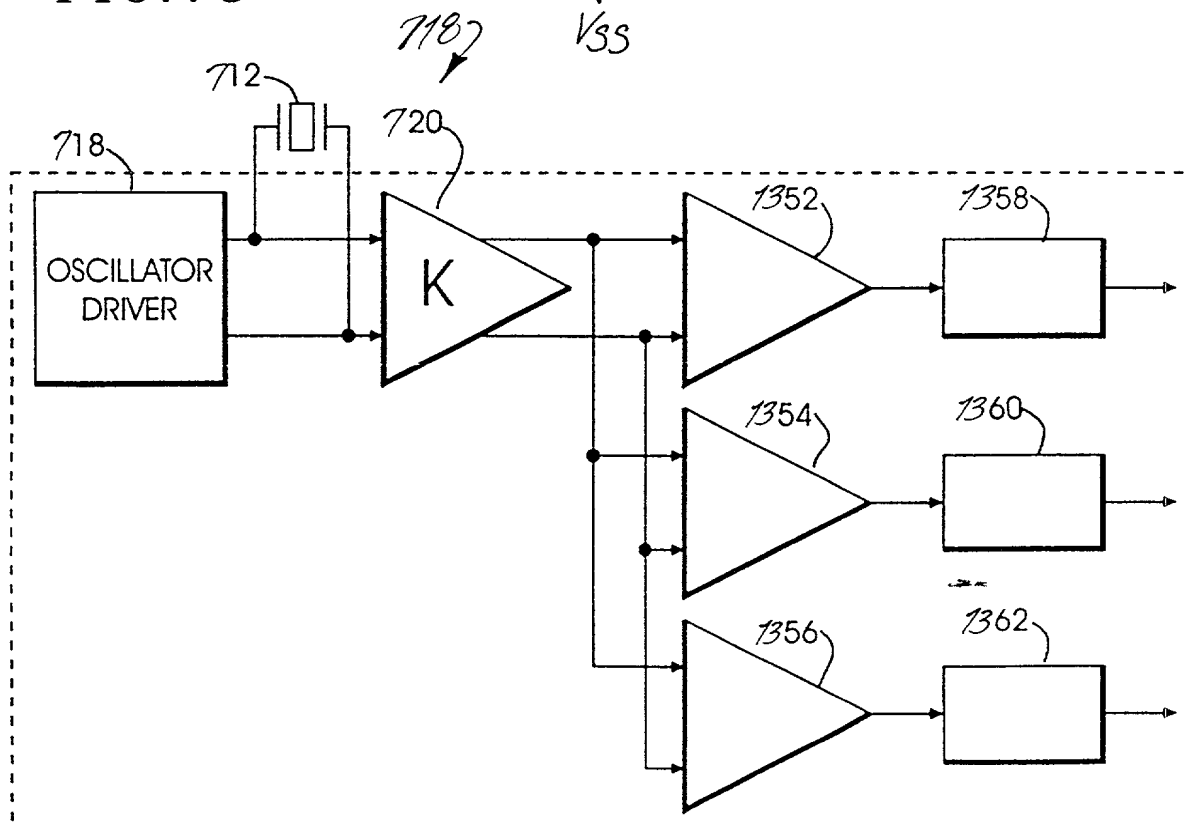


FIG. 14

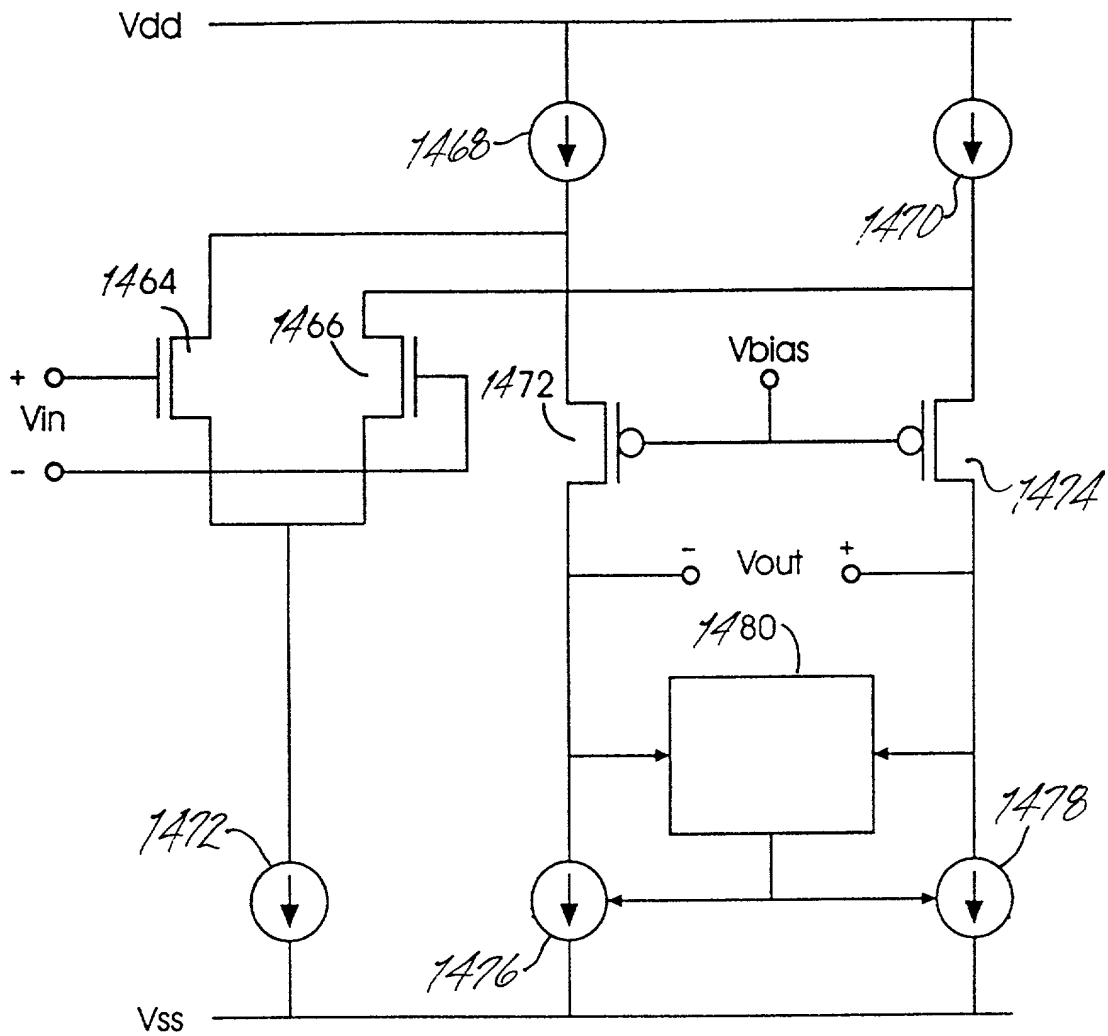




FIG. 16

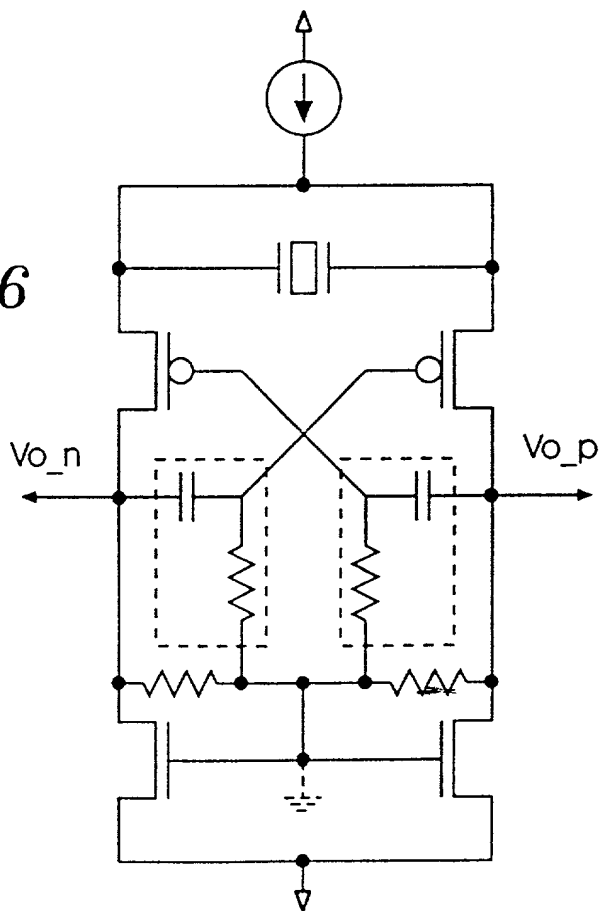


FIG. 15

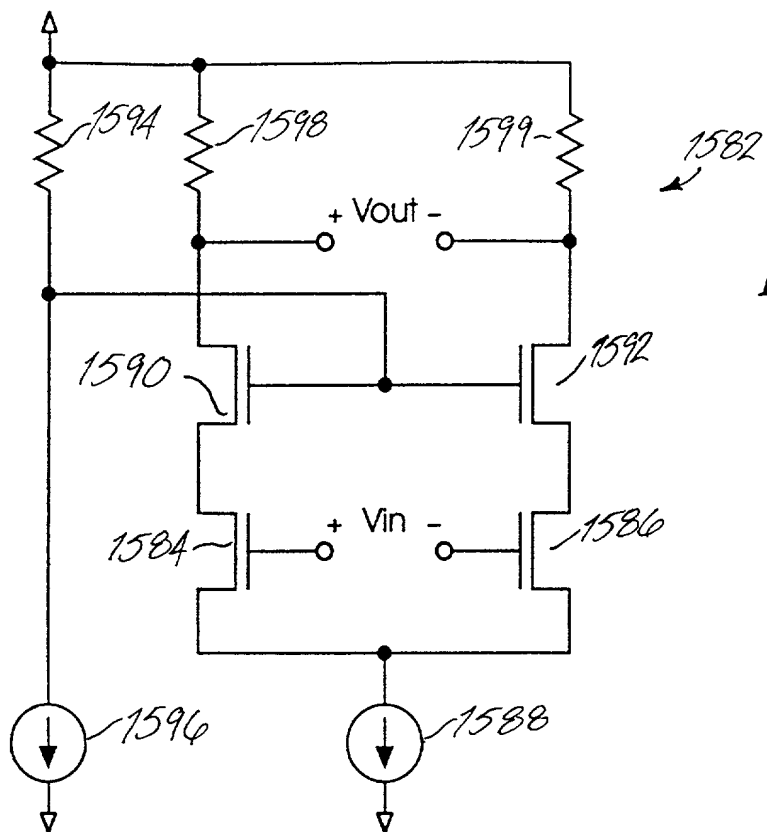


FIG. 17

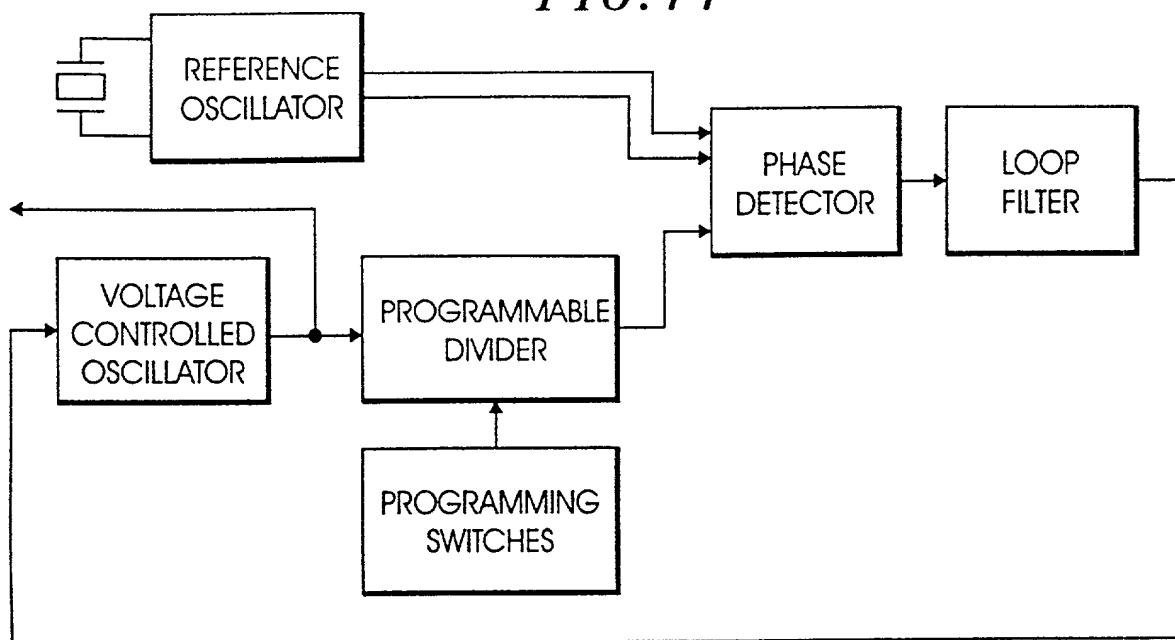


FIG. 18

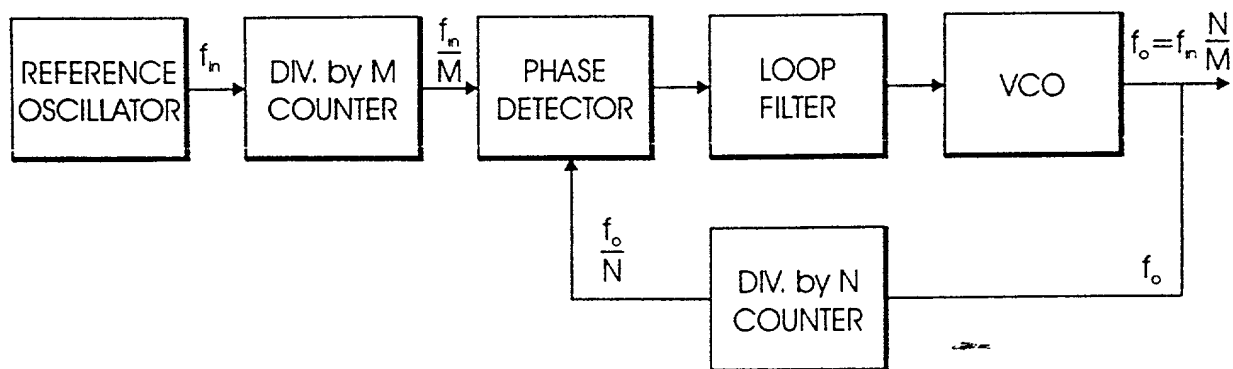


FIG. 19

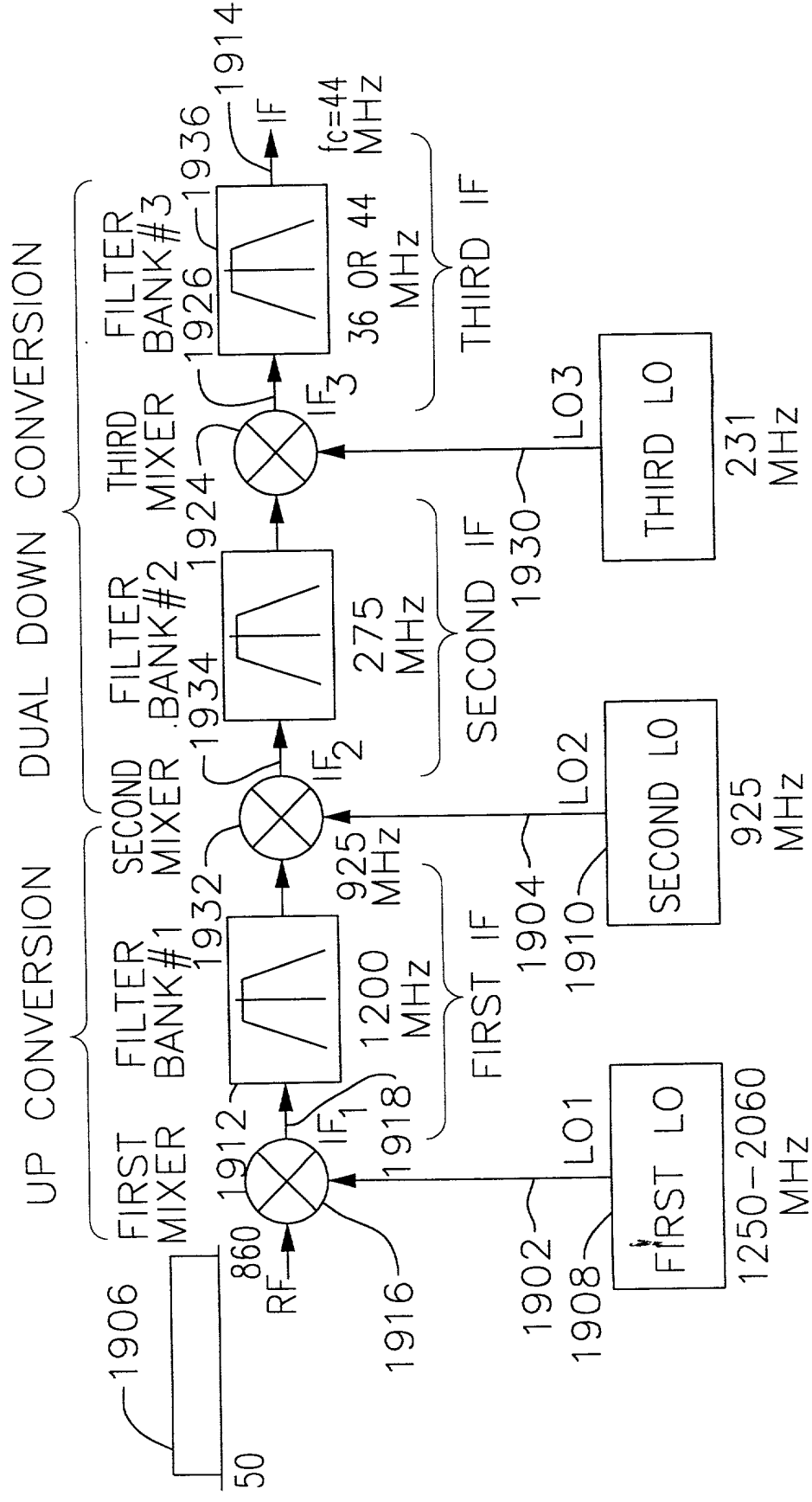
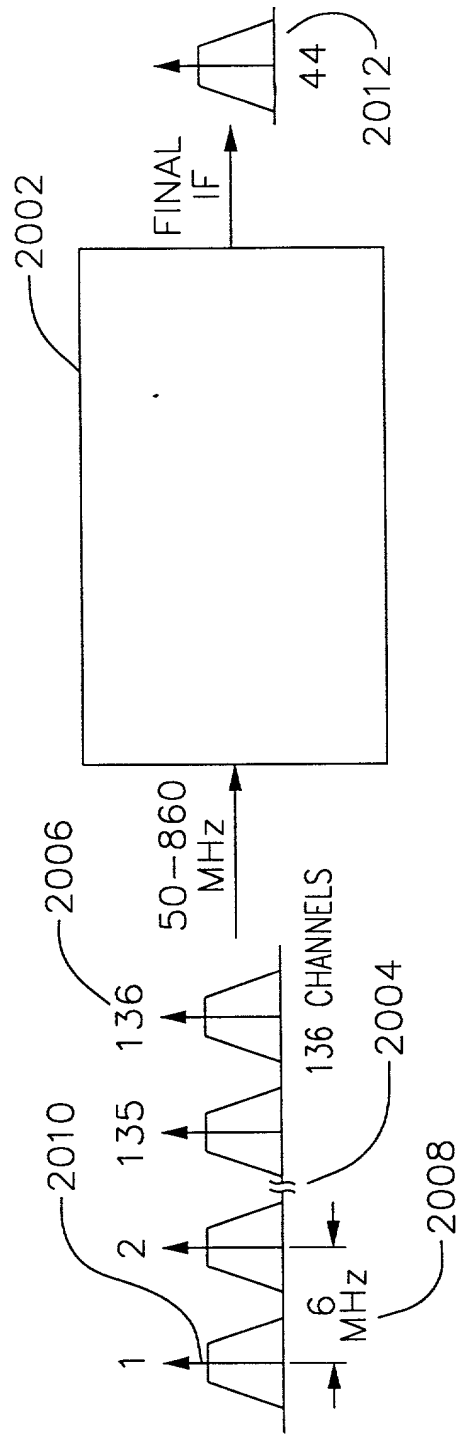


FIG. 20



# FIG. 21

PPL Xtol REFERENCE=10MHz  
 LO-1, 10MHz FREQUENCY STEPS  
 LO-2, 100kHz FREQUENCY STEPS

44MHz IF

NOTE  
 •LO-2 REF=100KHz,  
 SO DIVIDE RANGE=9216 TO 9280

TABLE OF FREQUENCIES BASED ON  
 COARSE/FINE PLL SOLUTION:

Frq (MHz)	50	56	62	68	74	80	86	92	98	104	110	116	122	128	"	854	860
LO-1(MHz)	1250	1260	1260	1270	1270	1280	1290	1290	1300	1300	1310	1320	1320	1330	"	2050	2060
IF-1 (MHz)	1200	1204	1198	1202	1196	1200	1204	1198	1202	1196	1200	1204	1198	1202	"	1196	1200
LO-2(MHz)	924.8	928.0	923.2	926.4	921.6	924.8	928.0	923.2	926.4	921.6	924.8	928.0	923.2	926.4	"	921.6	924.8
IF-2(MHz)	275.2	276.0	274.8	275.6	274.4	275.2	276.0	274.8	275.6	274.4	275.2	276.0	274.8	275.6	"	274.4	275.2
LO-3(MHz)	231.2	232	230.8	232	230	231	232	231	232	230	231	232	231	232	"	230	231
IF-3(MHz)	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	"	44.0	44.0

2102

## FIG.22

PPL Xtal REFERENCE=10MHz  
 LO-1, 10MHz FREQUENCY STEPS  
 LO-2, 100kHz FREQUENCY STEPS

36MHz IF

NOTE  
 • LO-2 REF=100KHz,  
 SO DIVIDE RANGE=9280 TO 9340

TABLE OF FREQUENCIES BASED ON  
 COARSE/FINE PLL SOLUTION:

FrF (MHz)	50	58	66	74	82	90	98	106	114	122	130	138	146	154	"	852	860
LO-1(MHz)	1250	1260	1270	1270	1280	1290	1300	1310	1310	1320	1330	1340	1350	1350	"	2050	2060
IF-1 (MHz)	1200	1202	1204	1196	1198	1200	1202	1204	1196	1198	1200	1202	1204	1196	"	1198	1200
LO-2(MHz)	931.2	932.8	934.4	928.0	930	931	933	934	928.0	930	931	933	934	928.0	"	929.60	931.2
IF-2(MHz)	268.8	269.2	269.6	268.0	268.4	268.8	269.2	269.6	268.0	268.4	268.8	269.2	269.6	268.0	"	268.4	268.8
LO-3(MHz)	232.8	233.2	233.6	232	232	233	233	234	232	232	233	233	234	232.0	"	232.4	232.8
IF-3(MHz)	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	"	36.0	36.0

FIG. 23

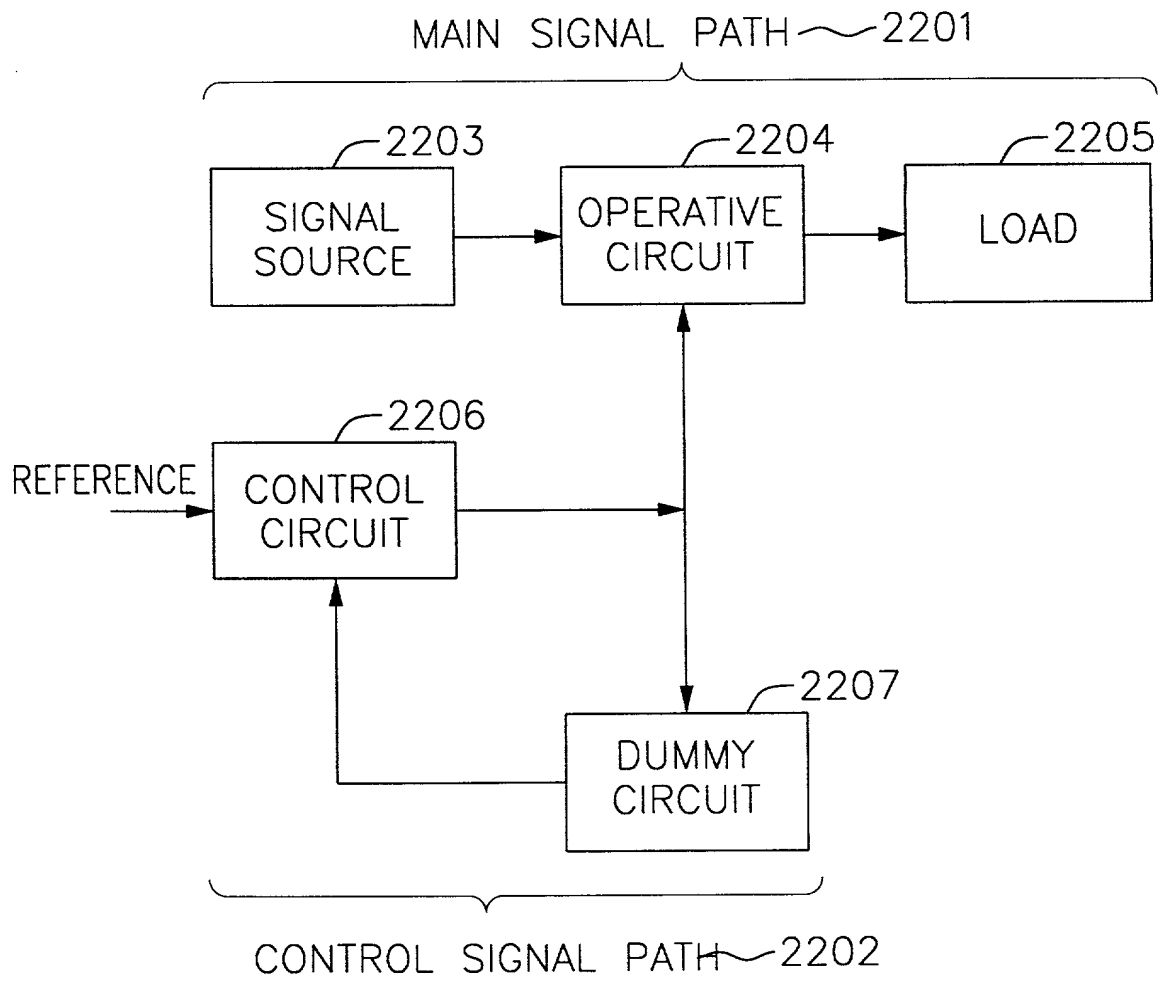


FIG. 24a

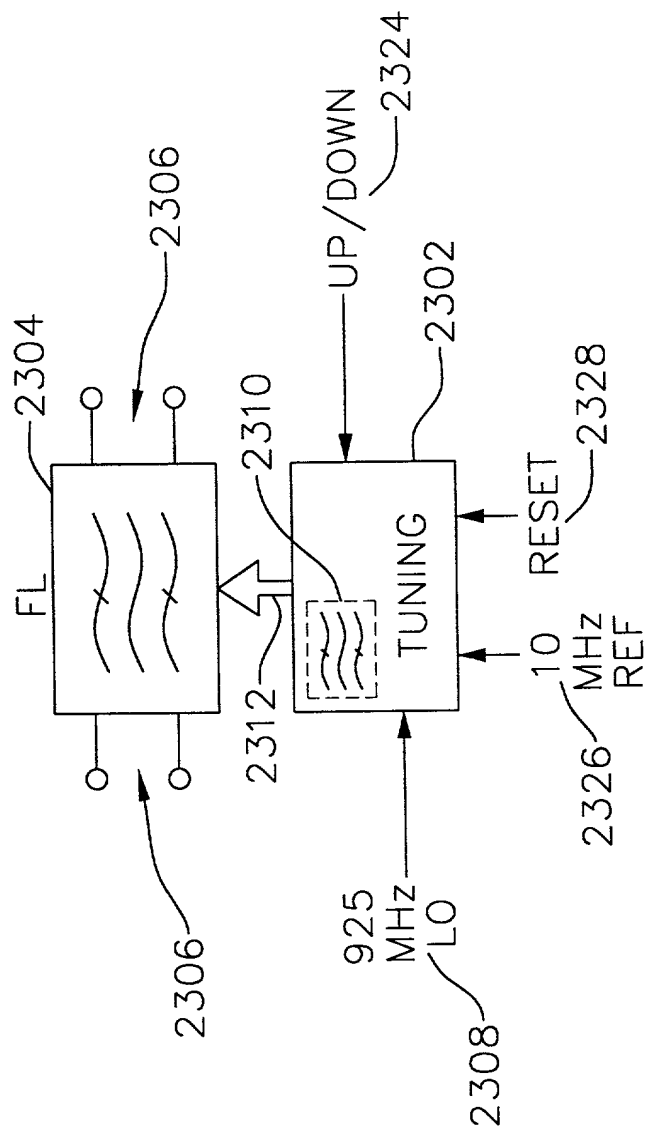




FIG. 24b

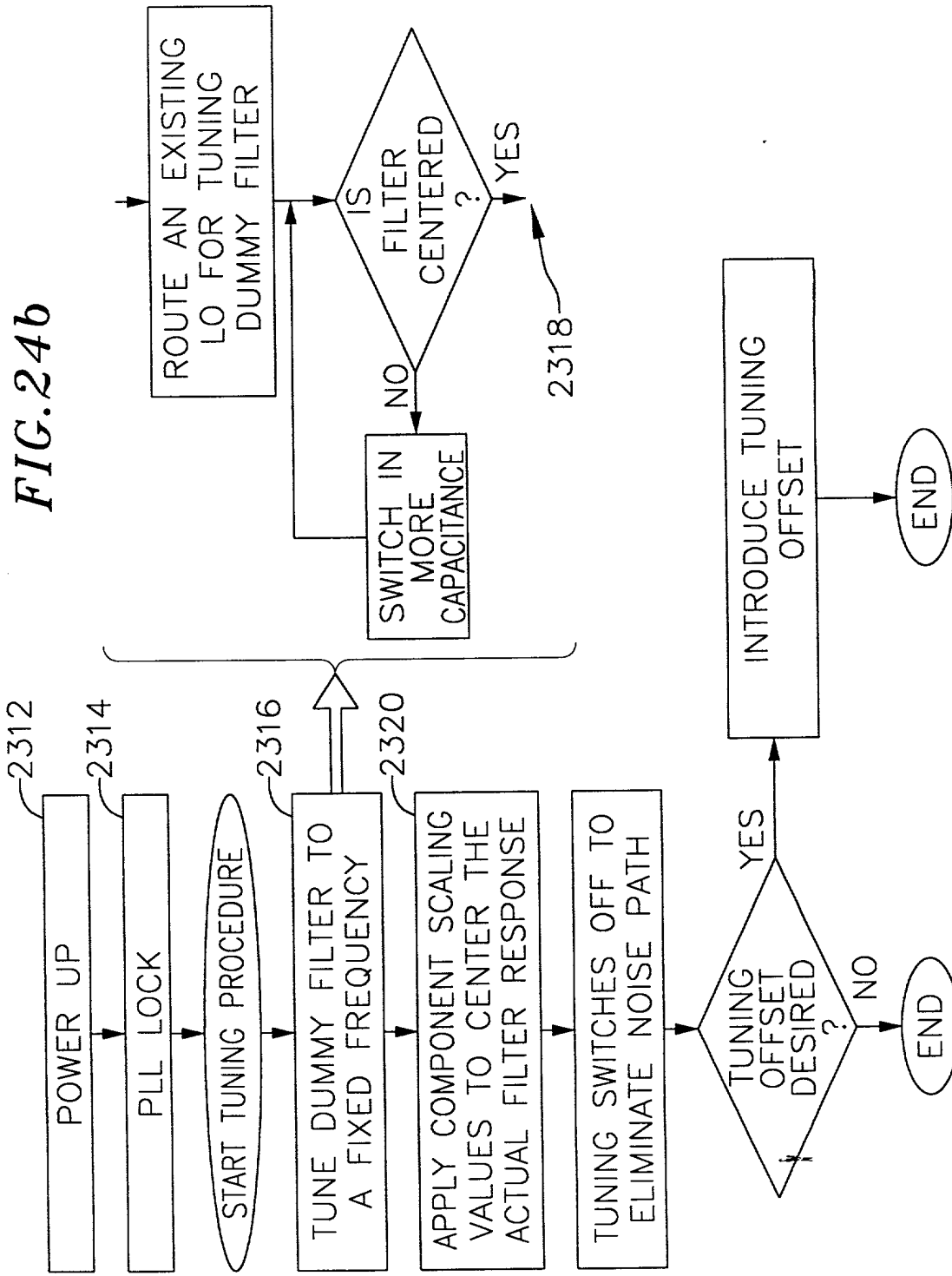
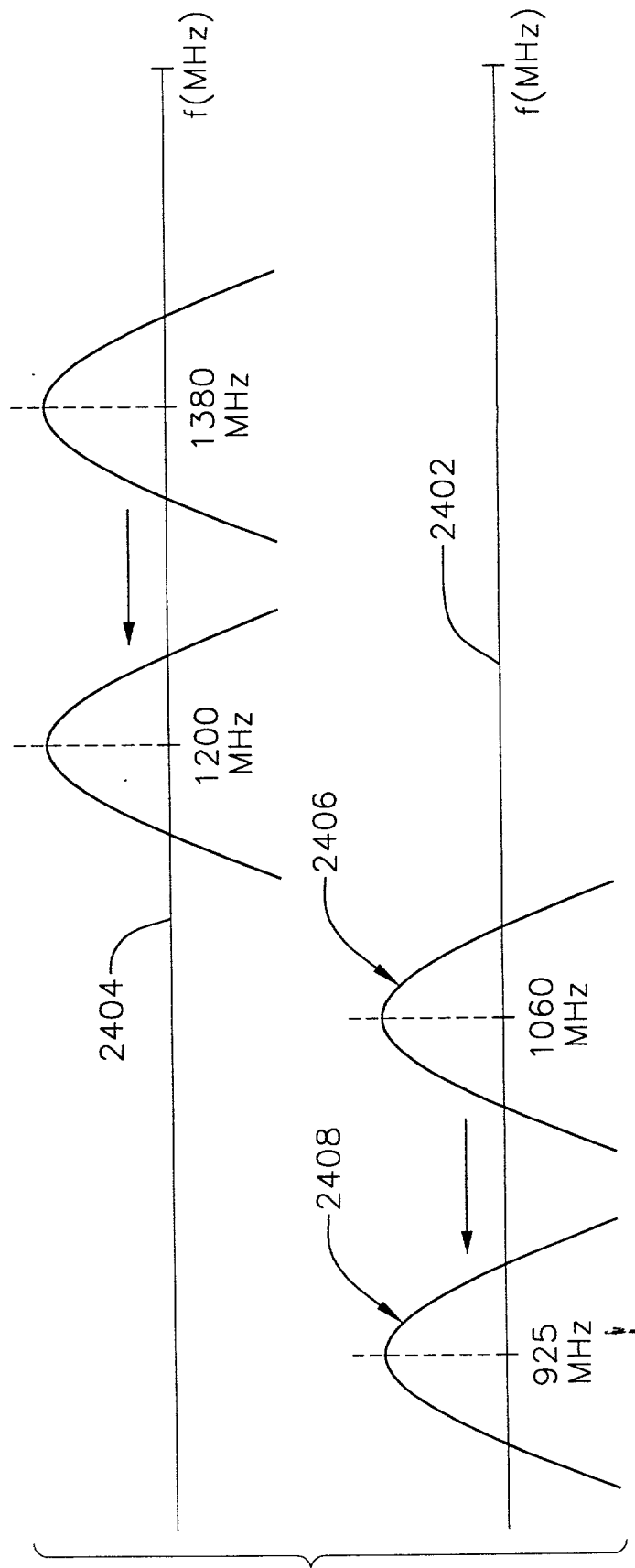
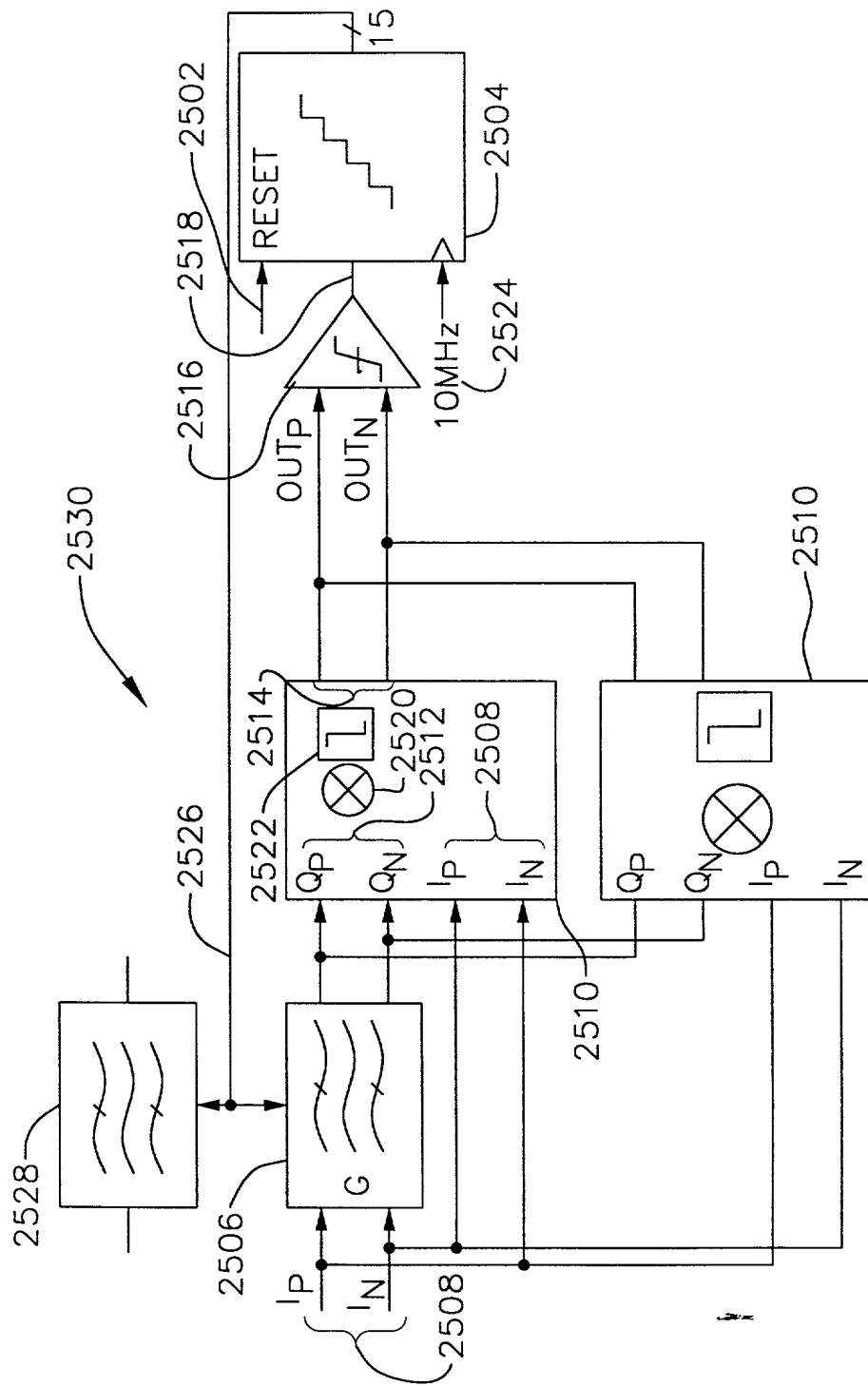


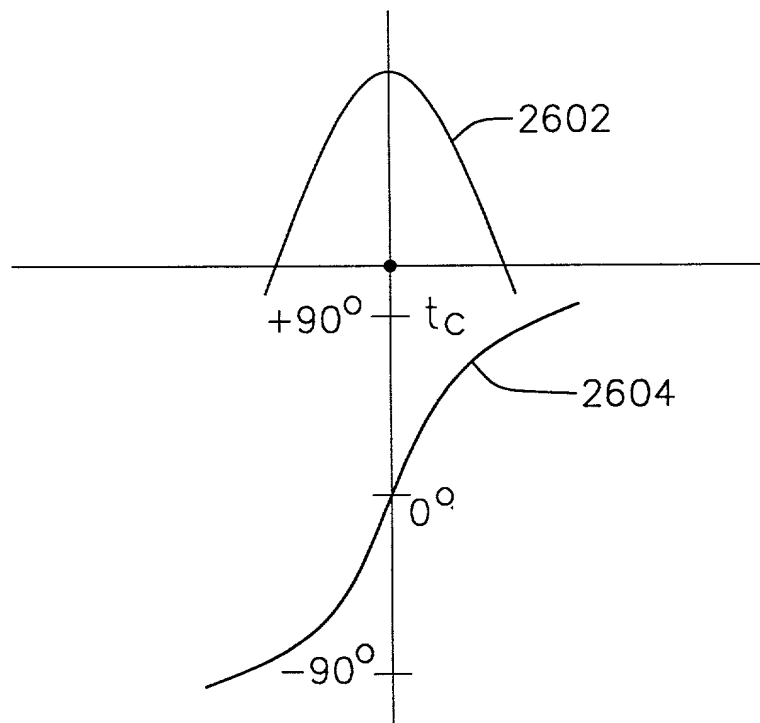
FIG. 24c

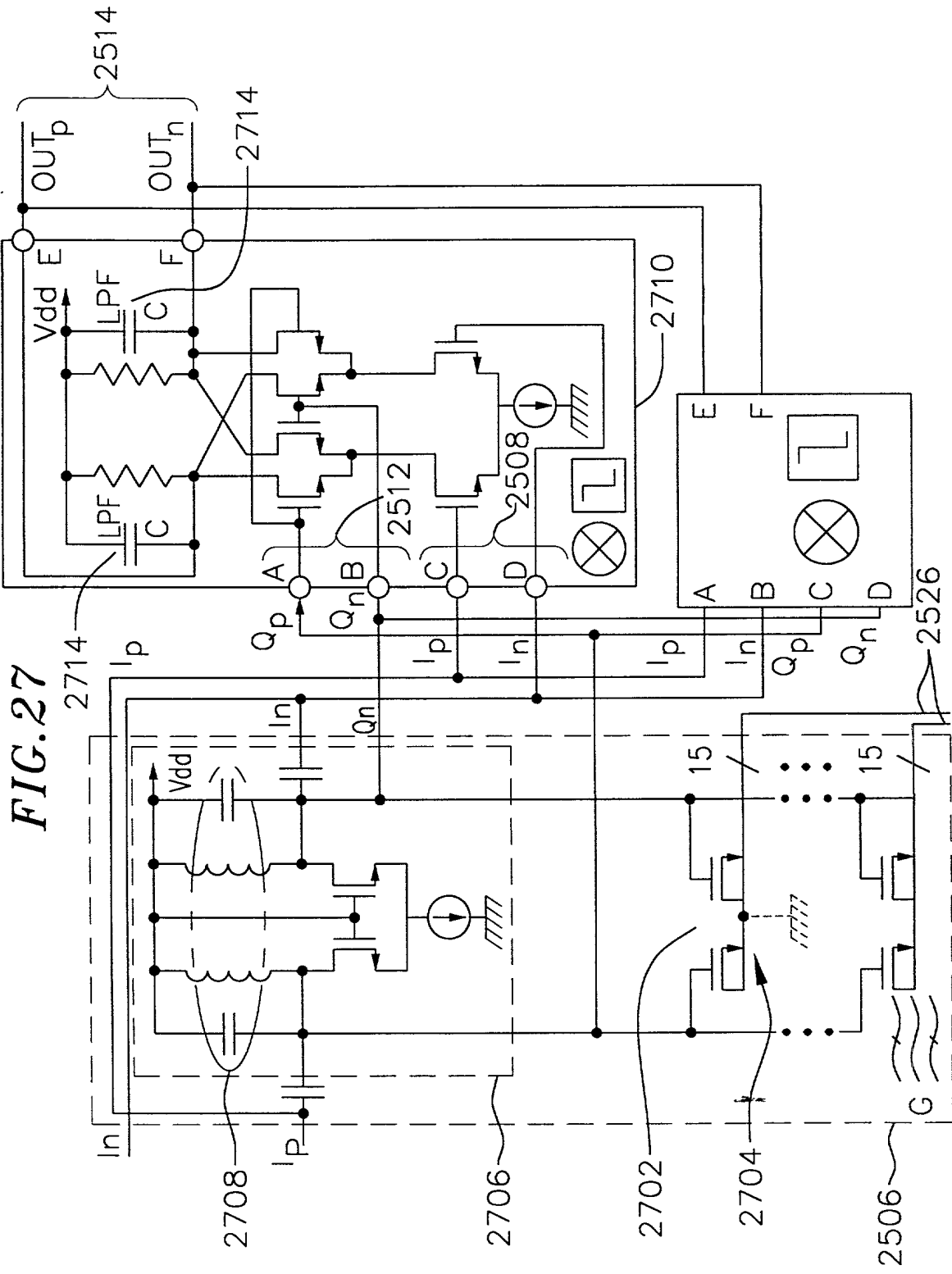


**FIG. 25**

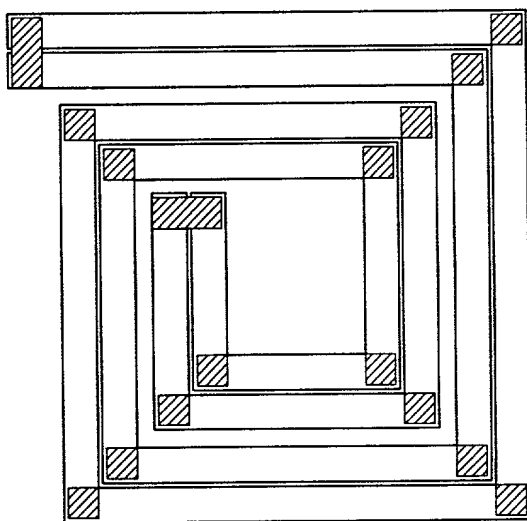


*FIG. 26*





*FIG.28*



09765048-011001  
TOP T.O. 8409260

FIG.29

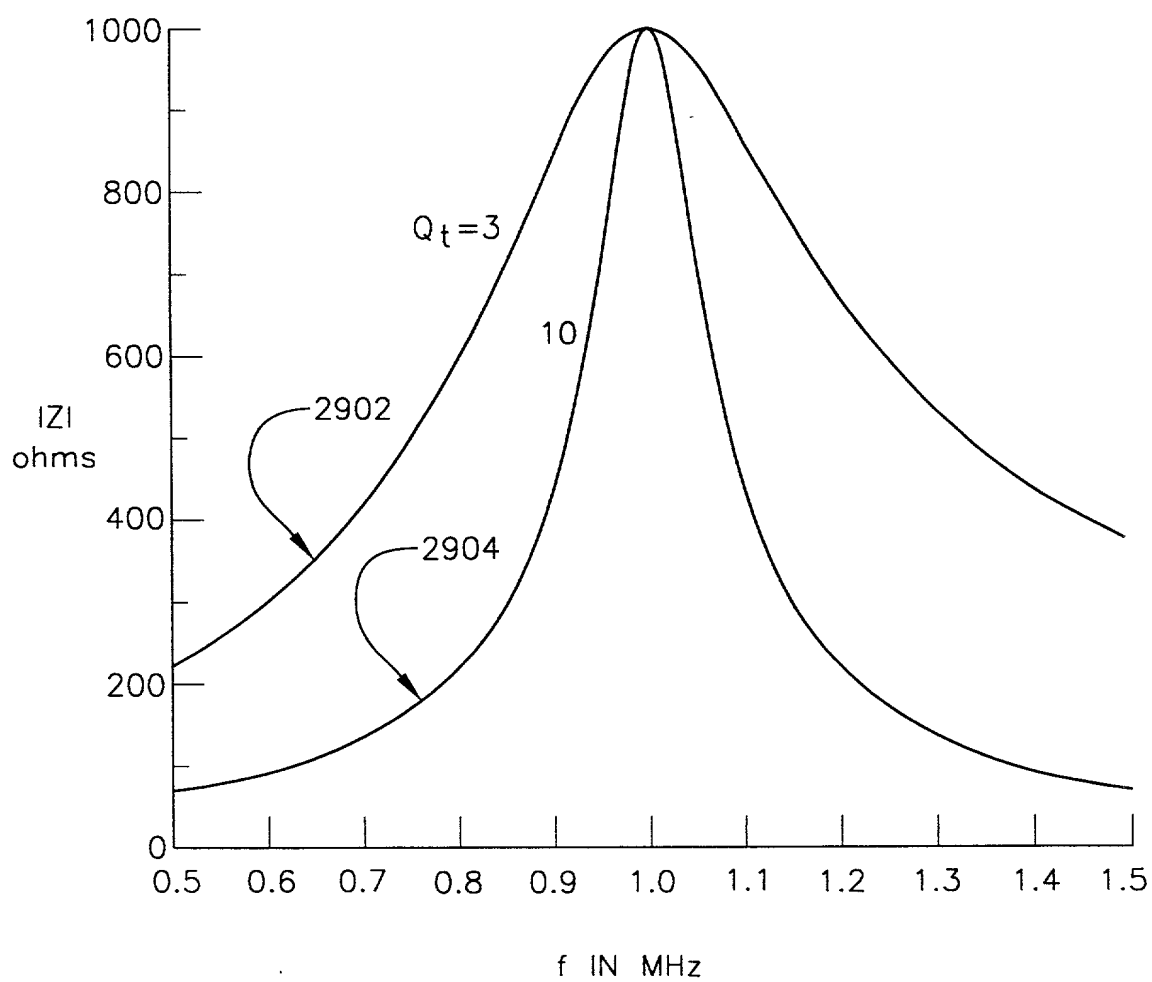


FIG. 30

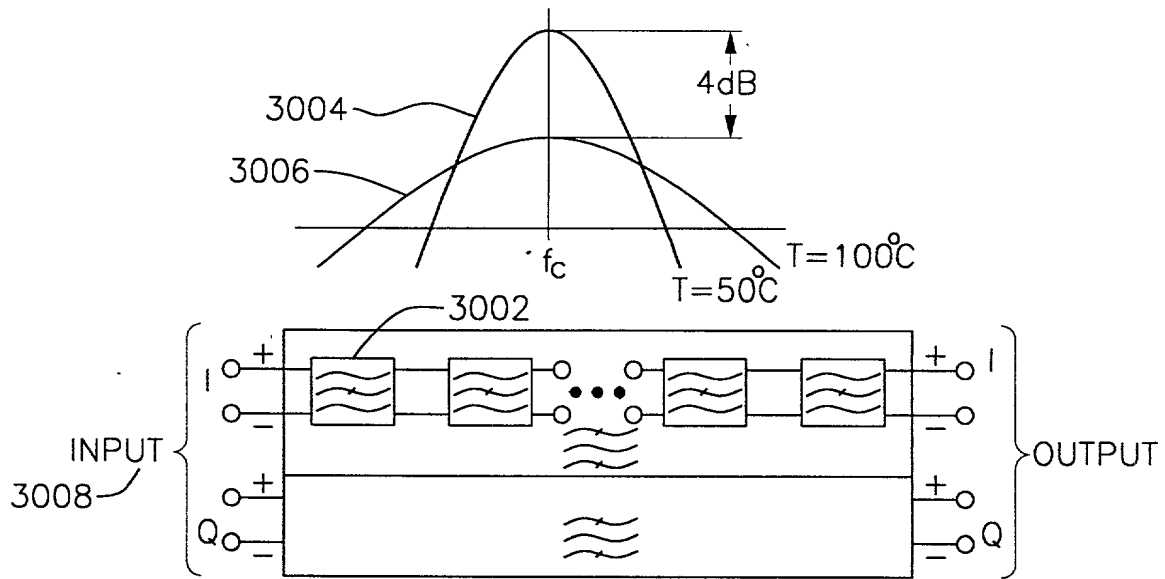


FIG. 31

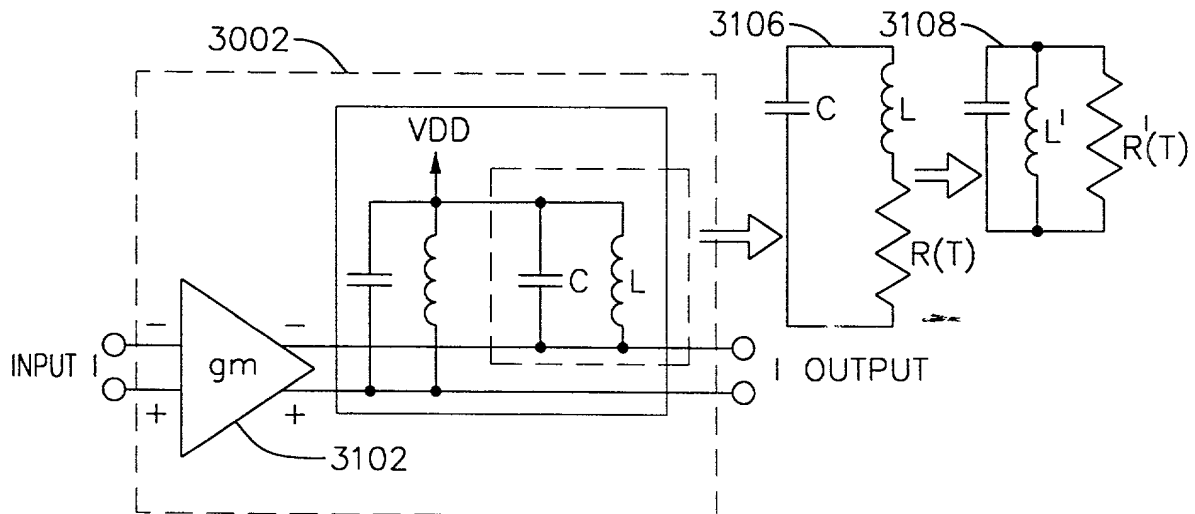




FIG. 32

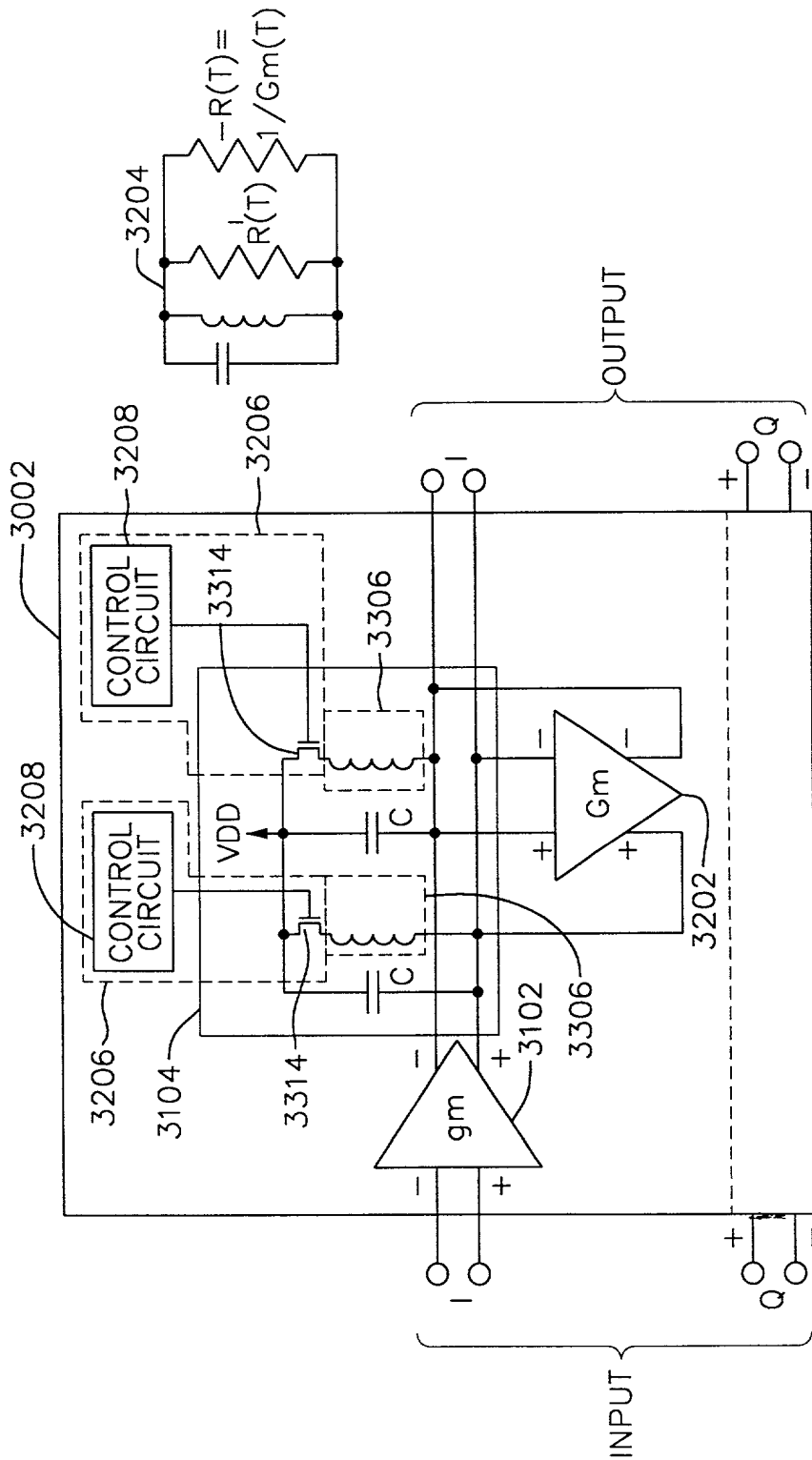


FIG. 33

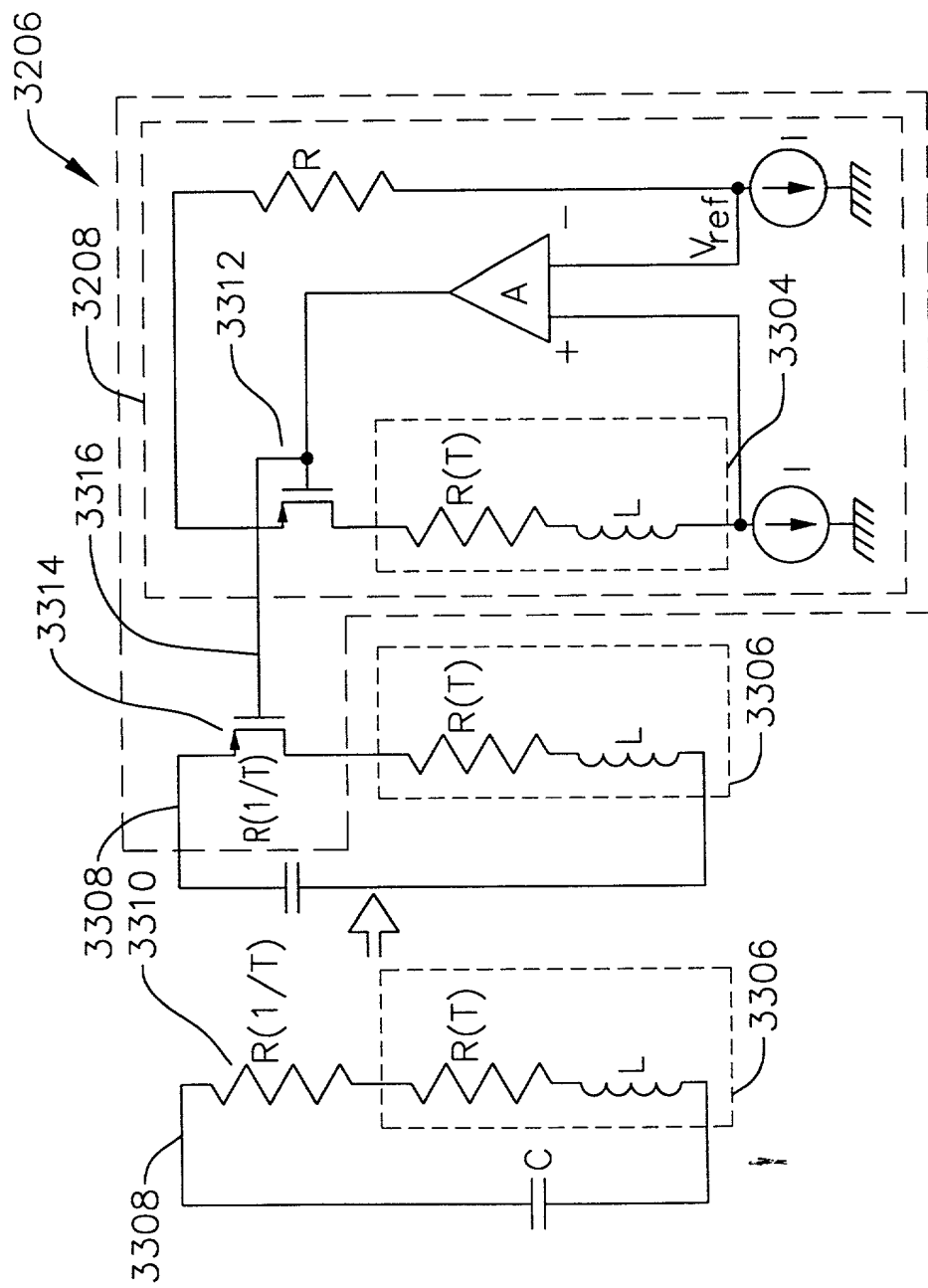


FIG. 34

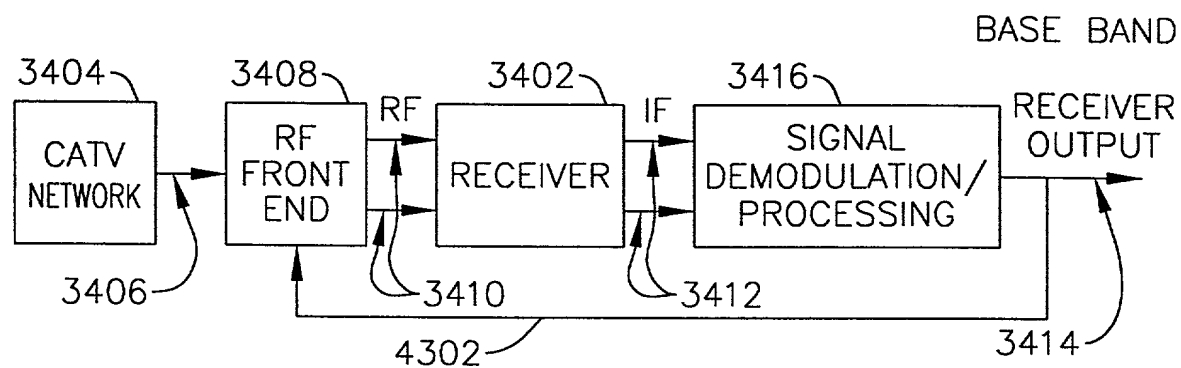


FIG. 35

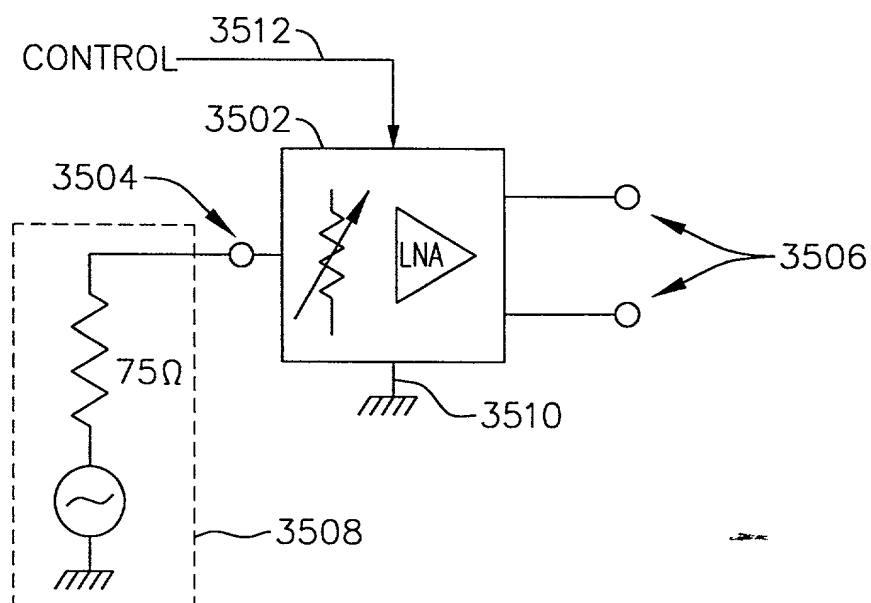


FIG. 36

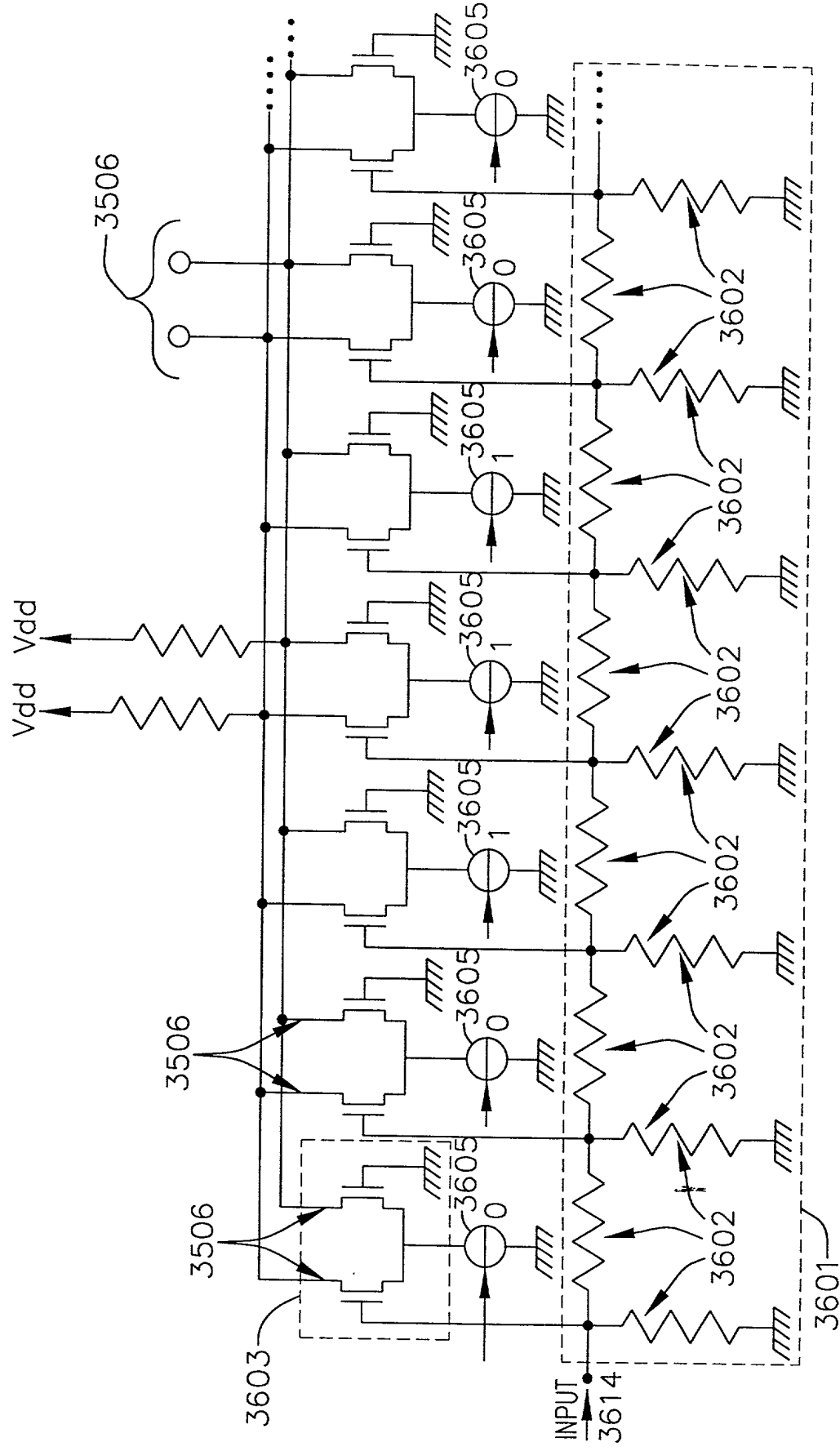


FIG. 37

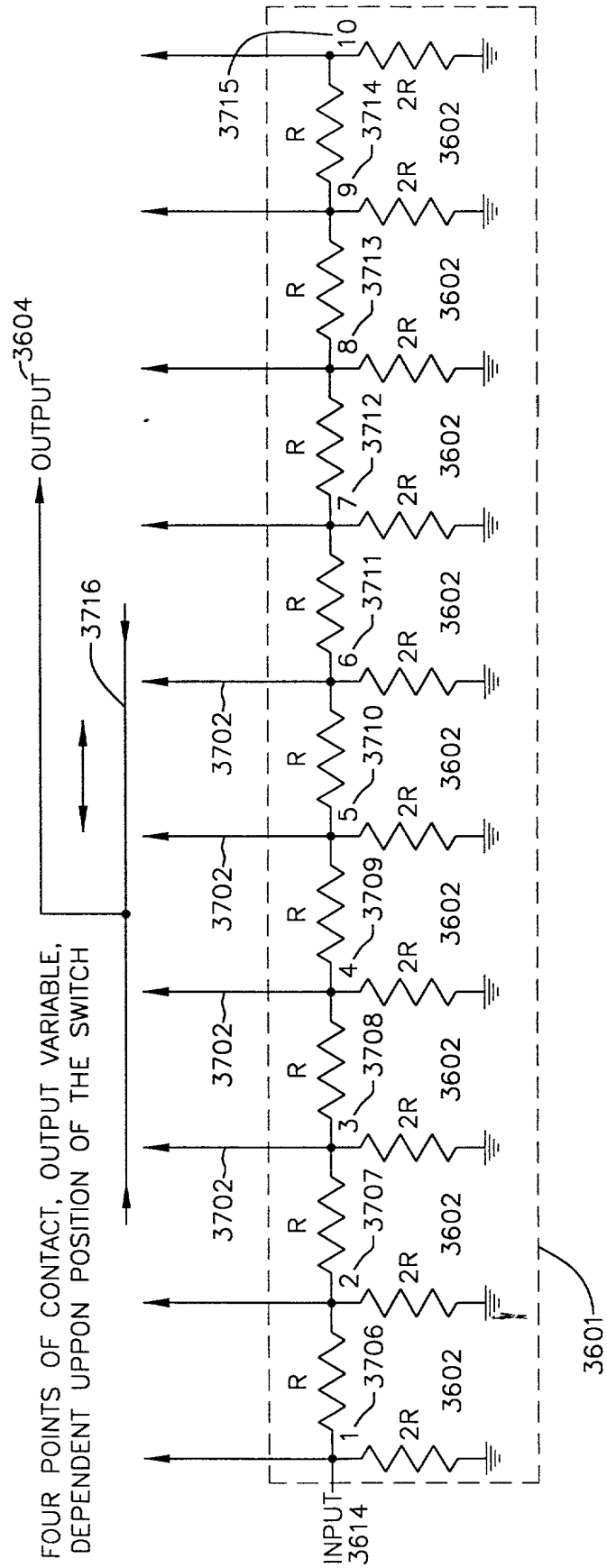
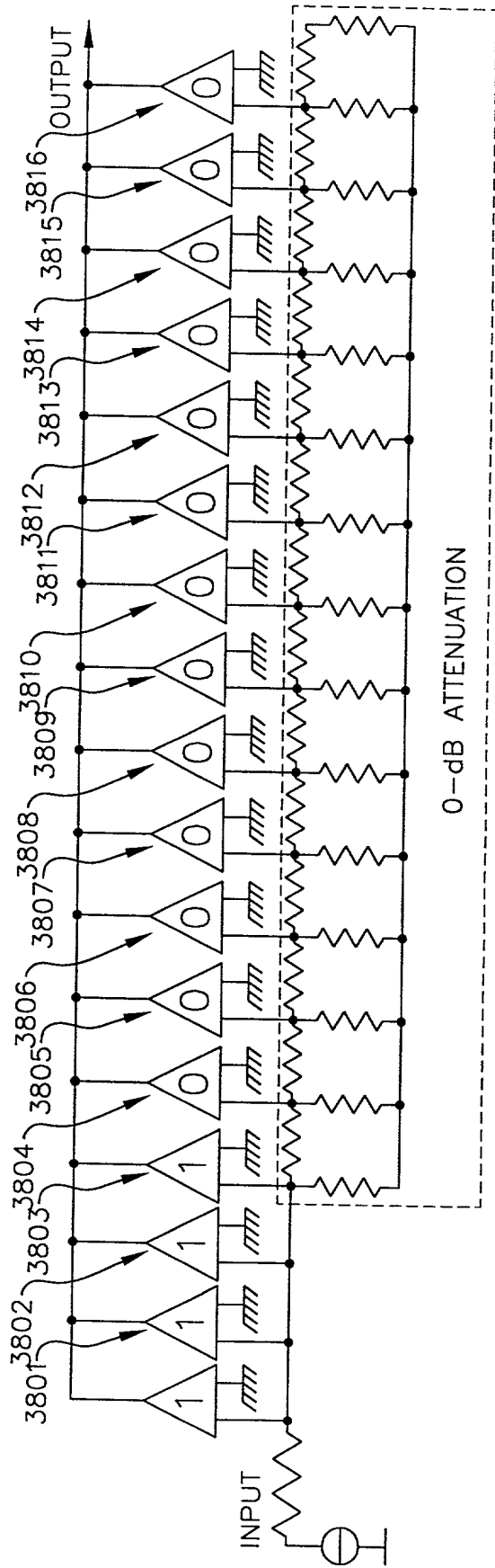


FIG. 38

PGA SETTINGS





**FIG. 41**

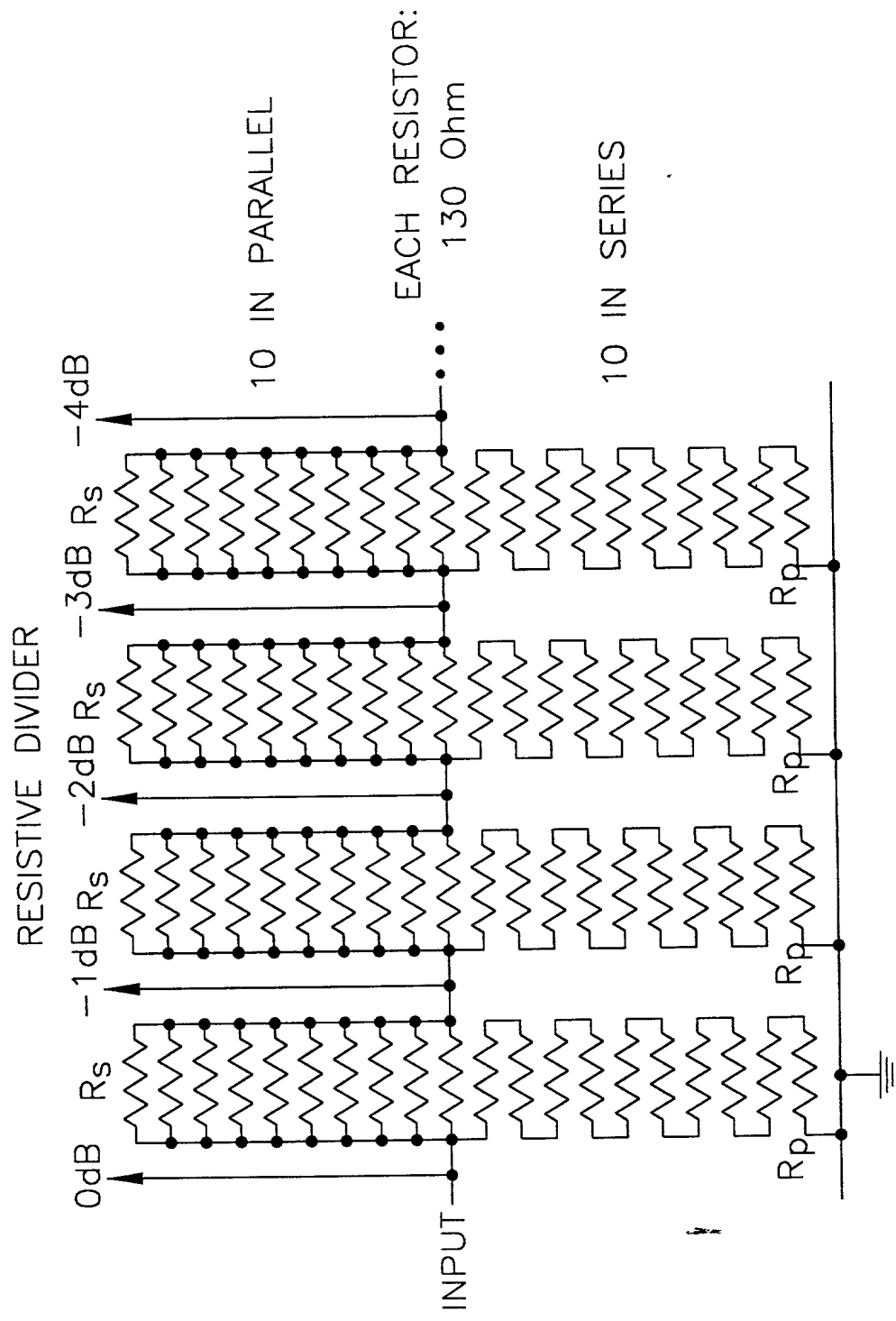
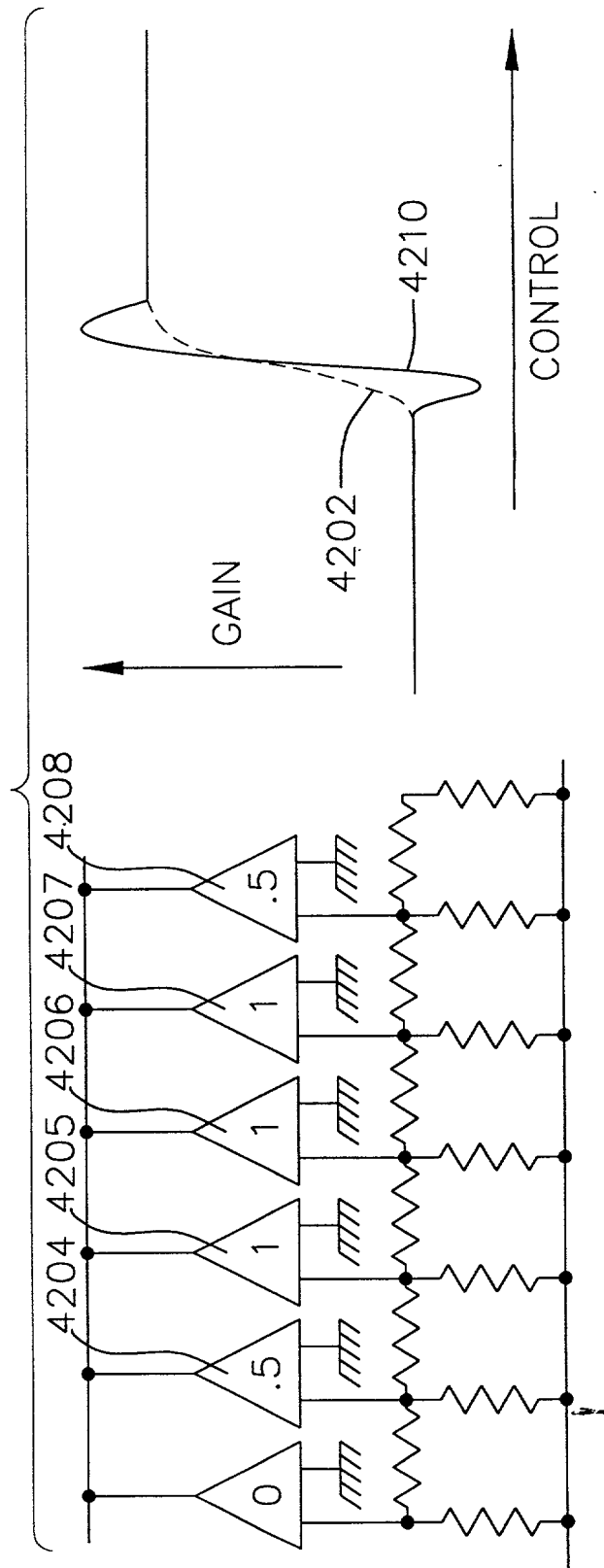




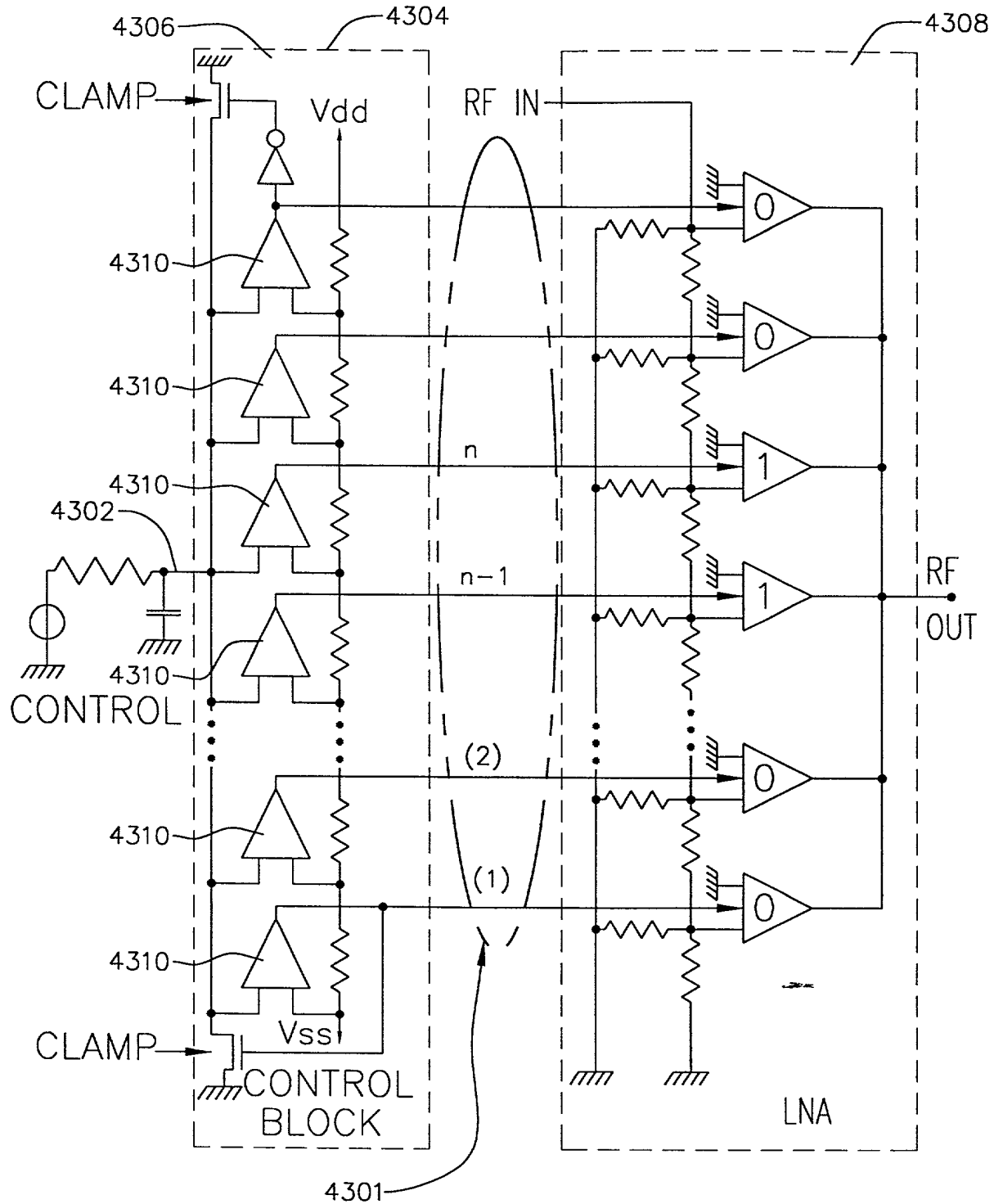
FIG. 42

NON-MONOTONICITY



**FIG. 43**

CLAMPING CONTROL RANGE



**FIG. 44a**  
CONTROLLED GAIN COMPARATOR

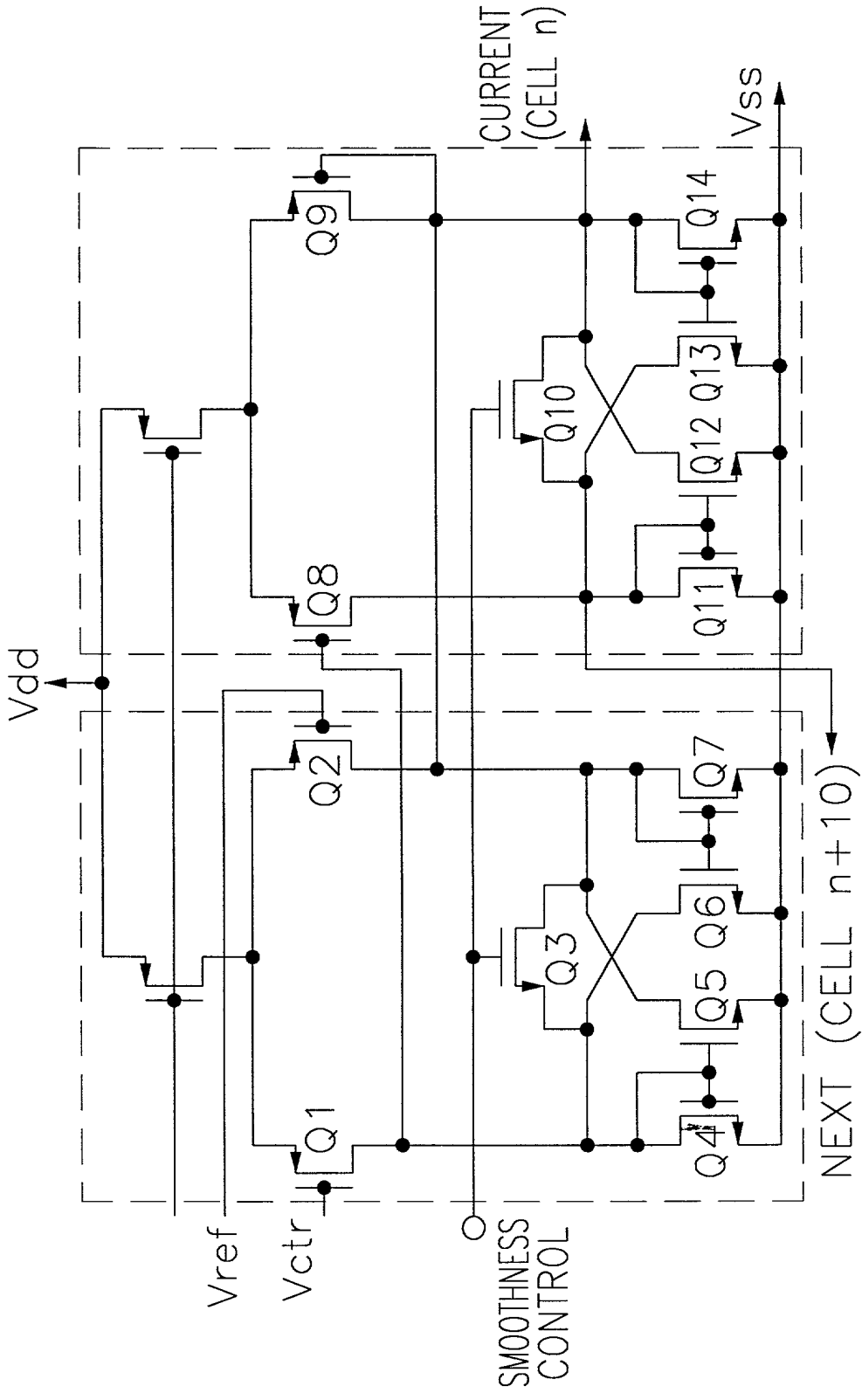


FIG. 44b

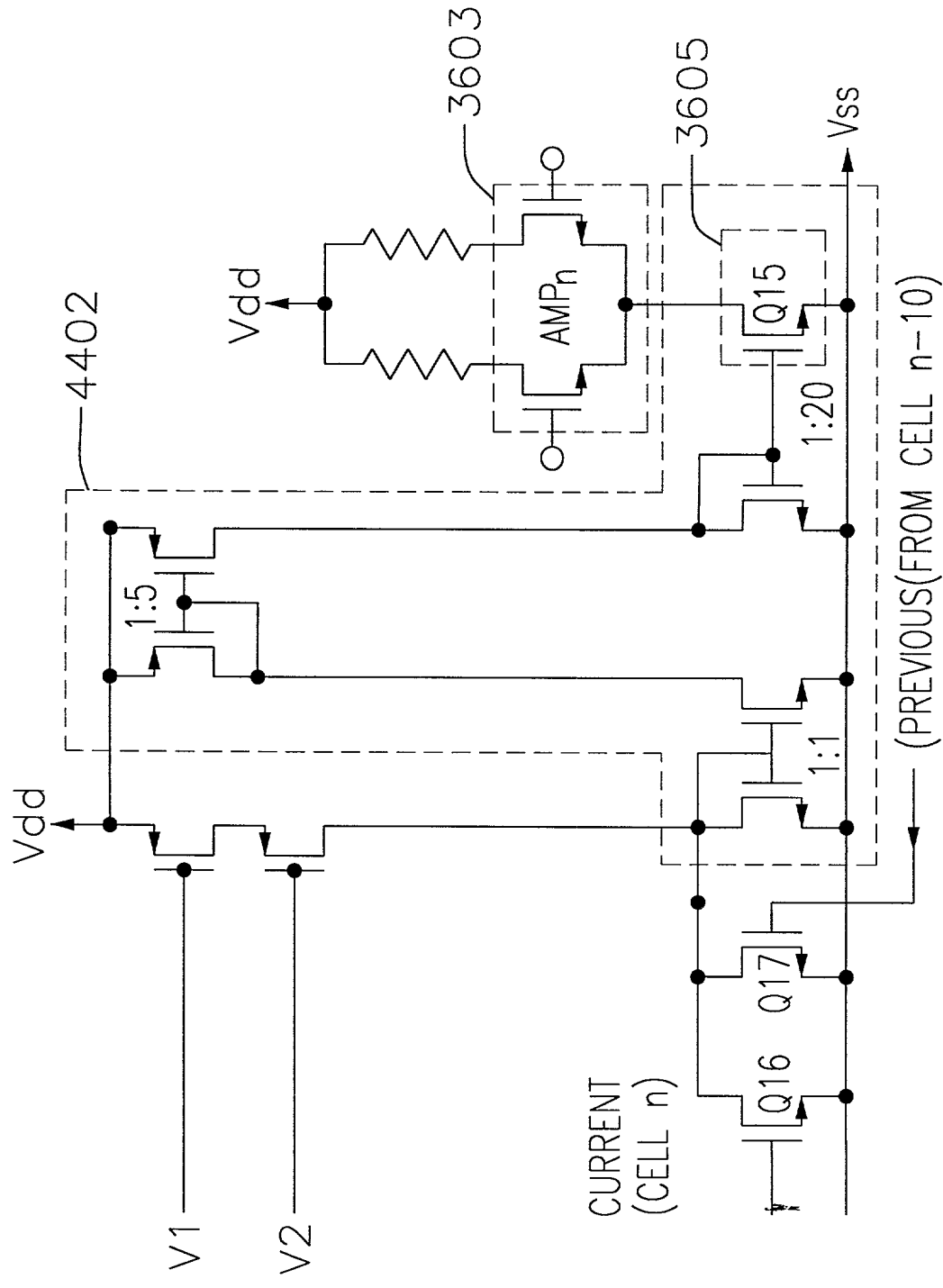
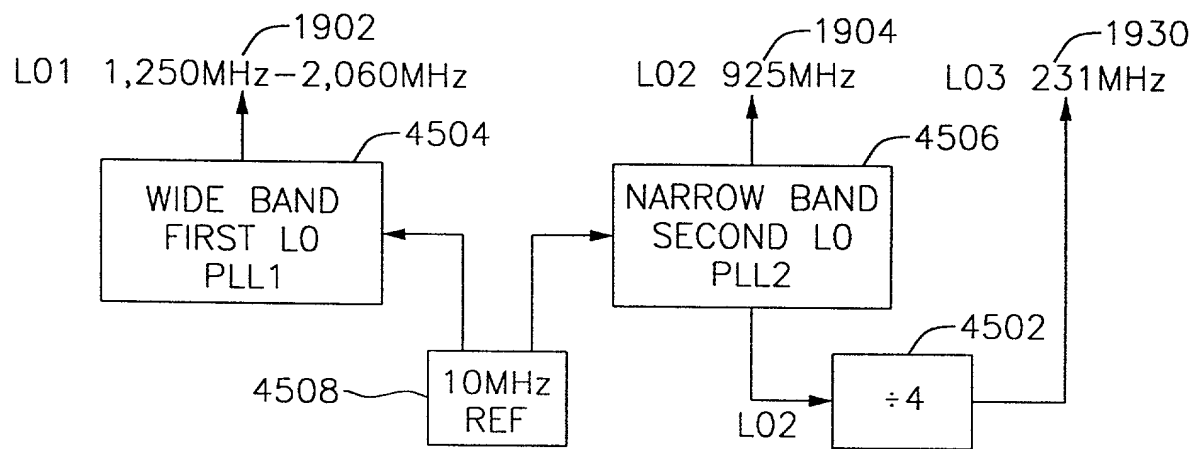


FIG. 45



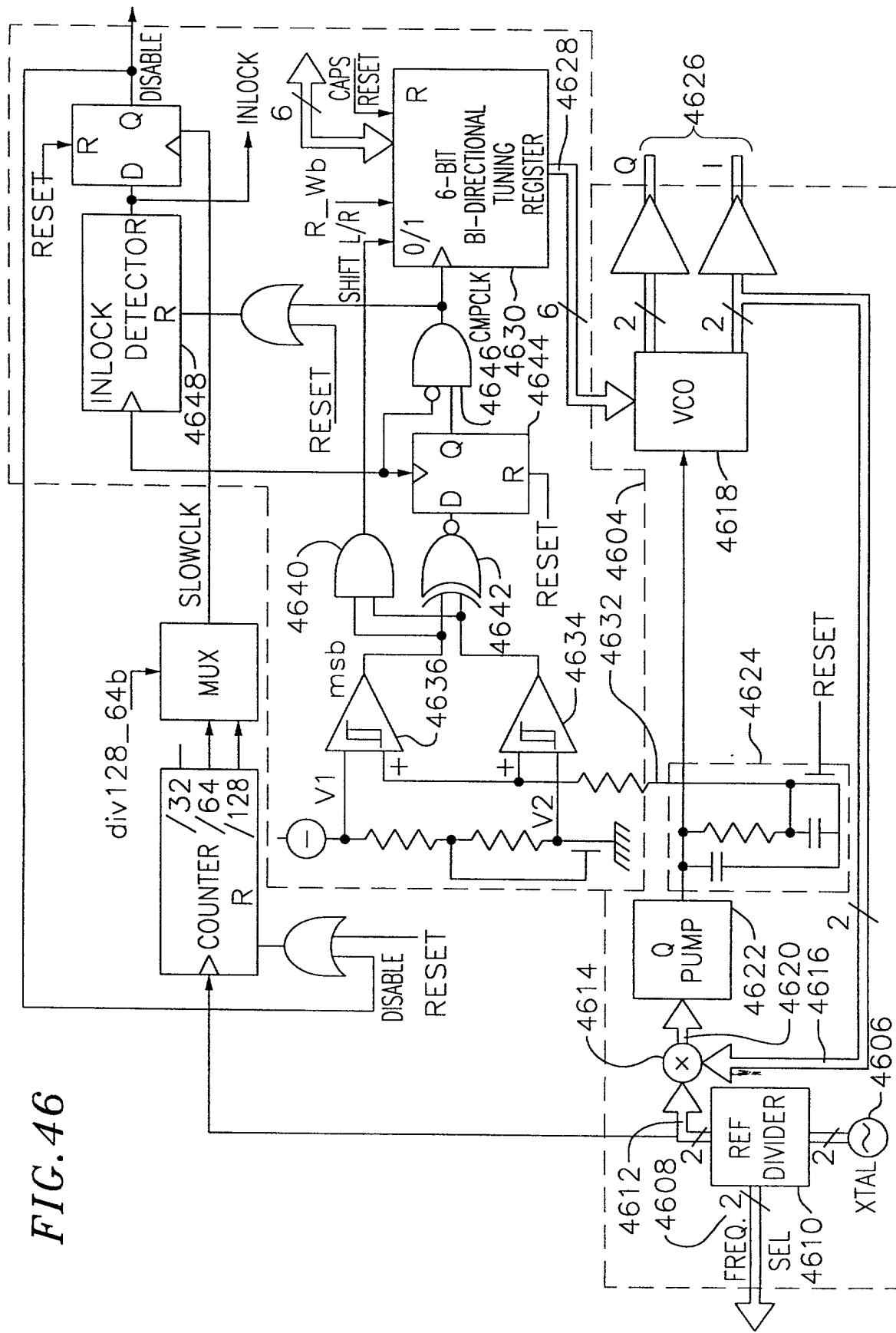
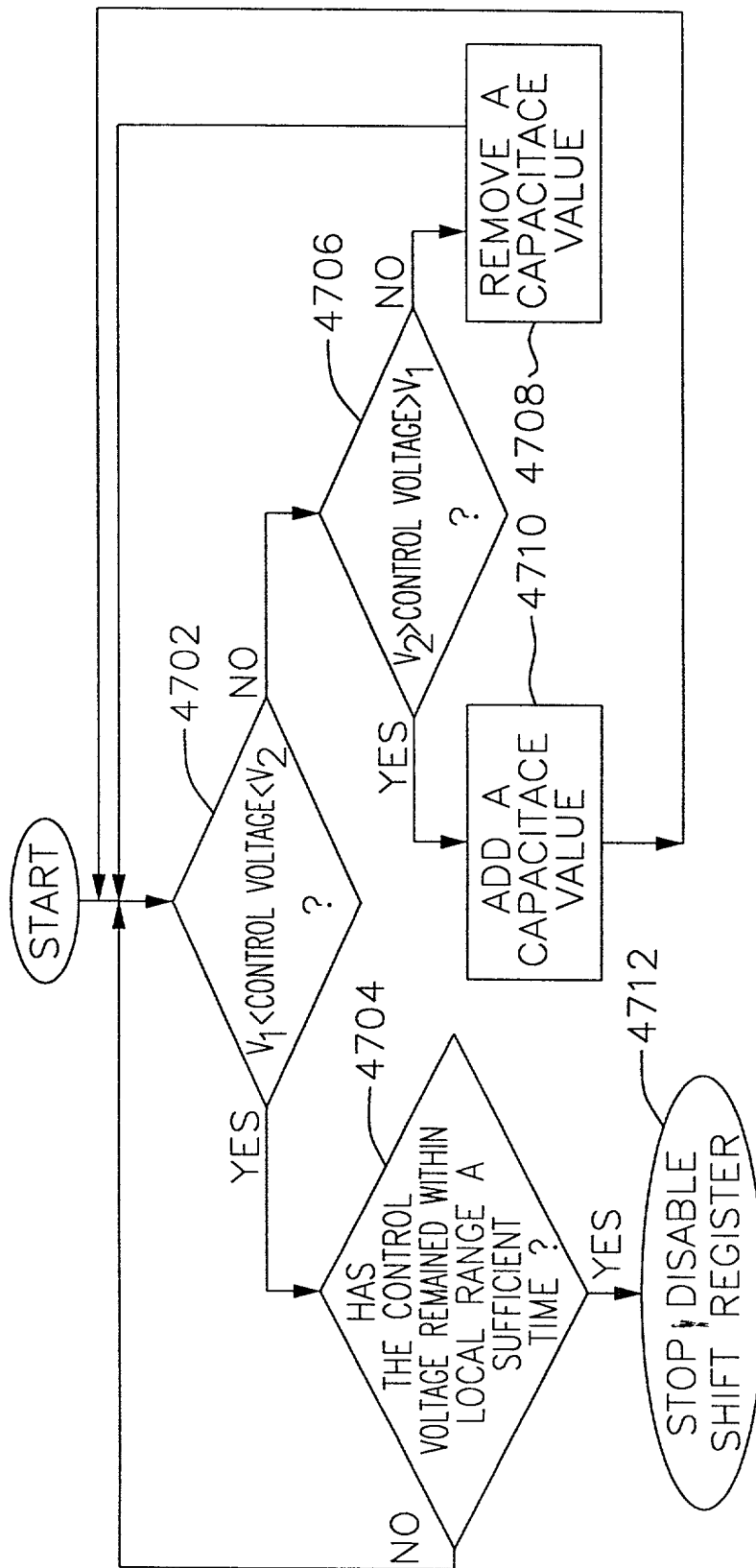


FIG. 47



EXTERNAL 36 OR 44MHz FILTER OPTION  
E.G. SIEMENS X6964 ( $f_c = 43.75\text{MHz}$ )

FIG. 48

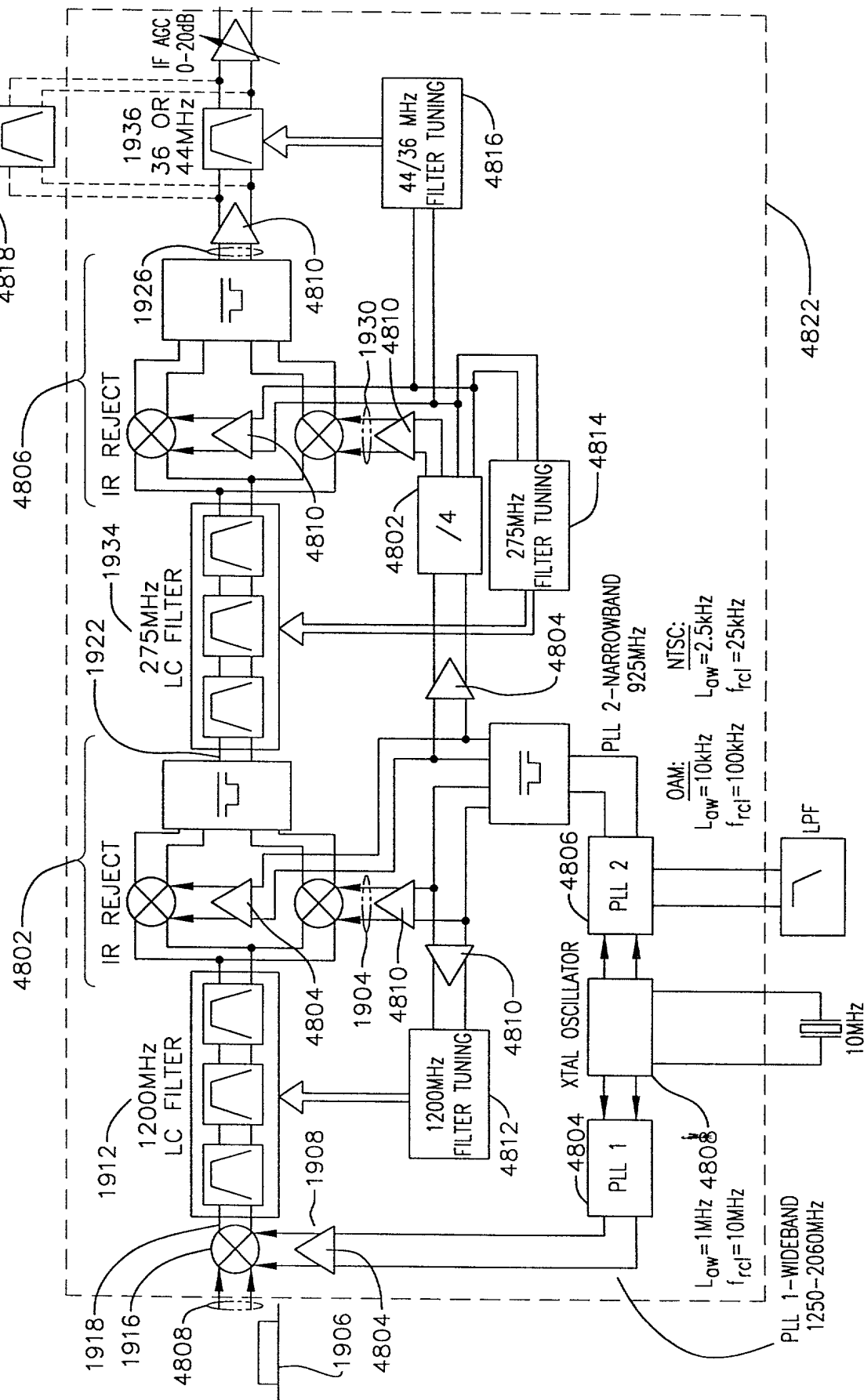




FIG. 49

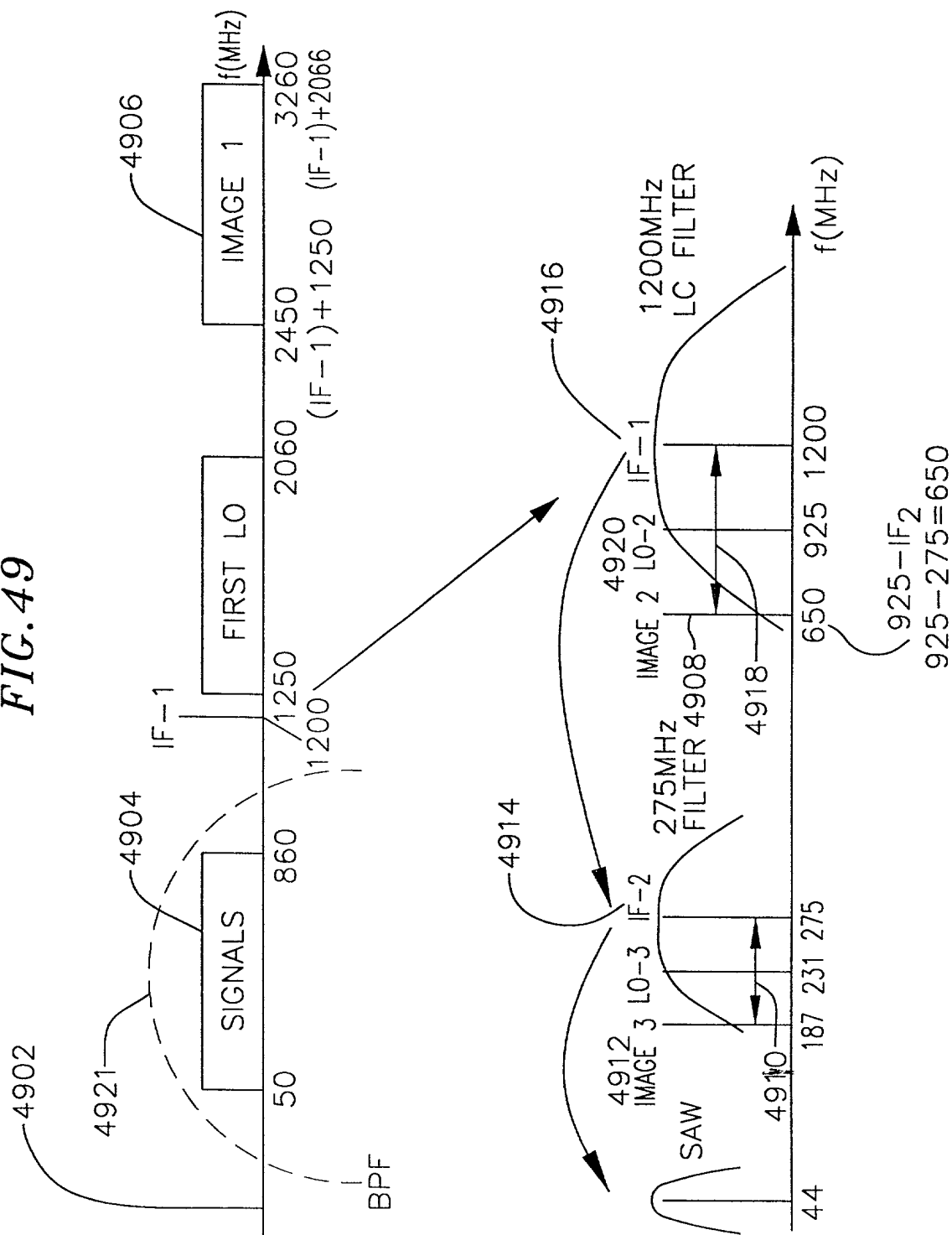


FIG. 50

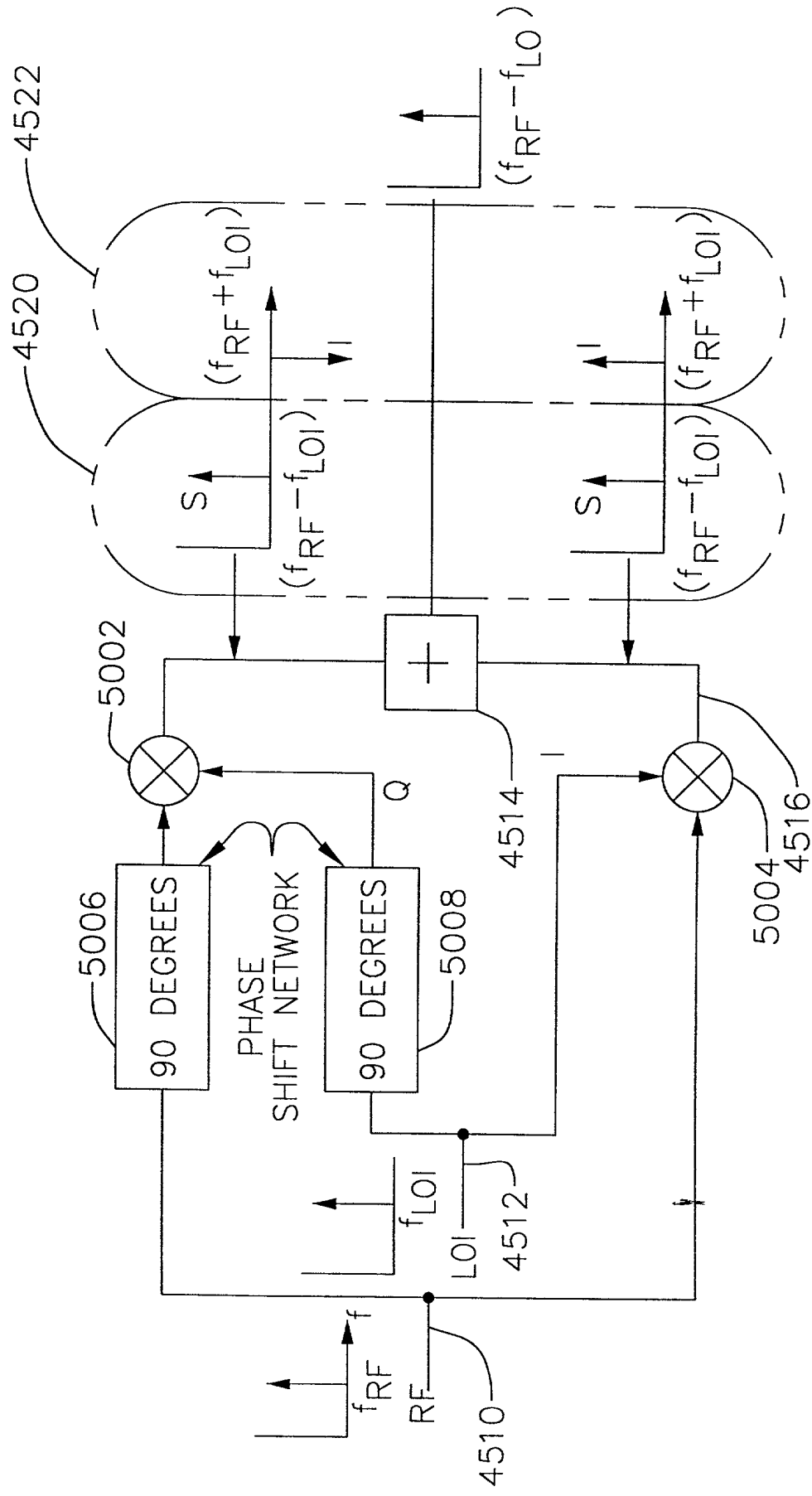


FIG. 51

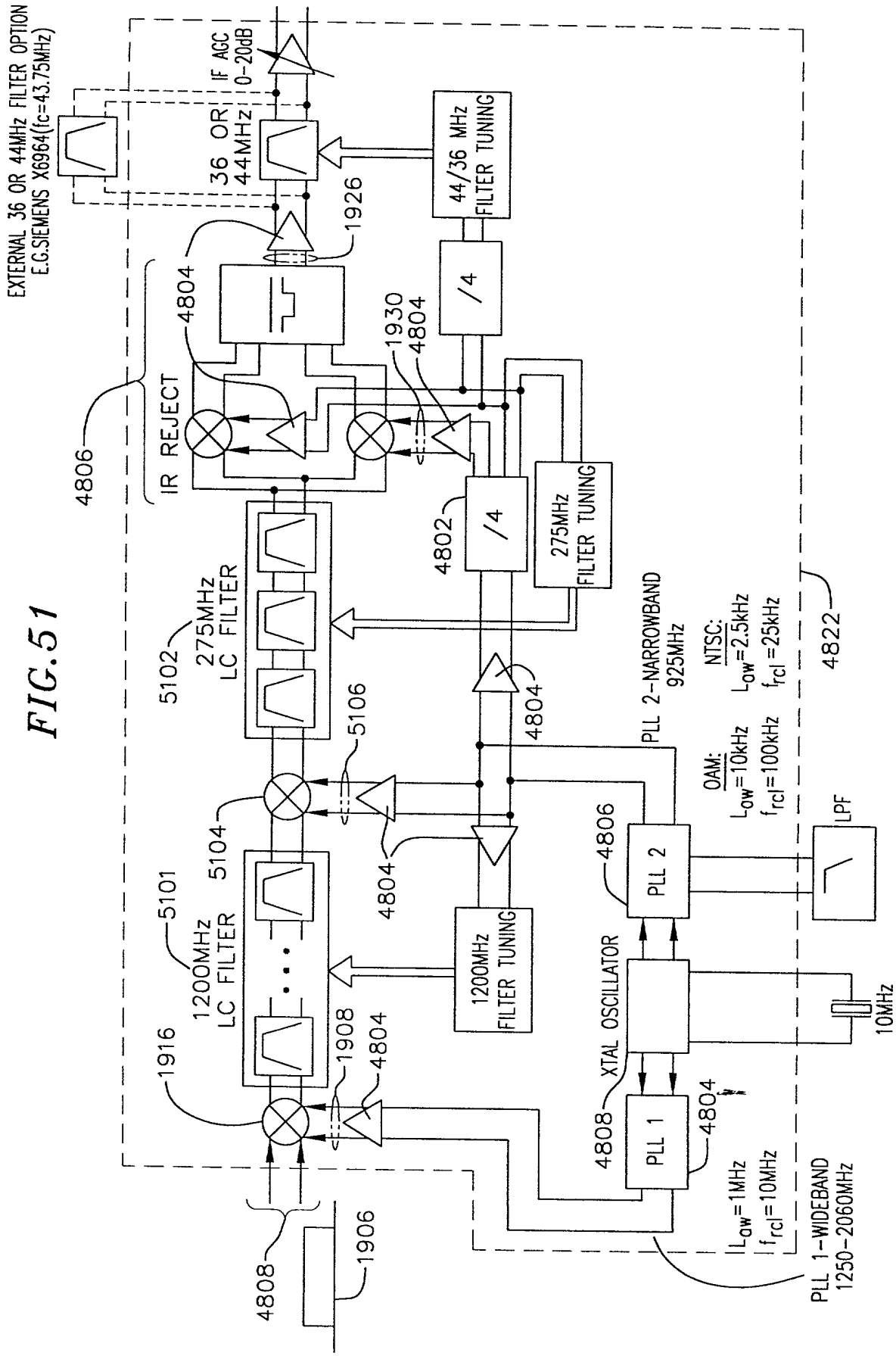
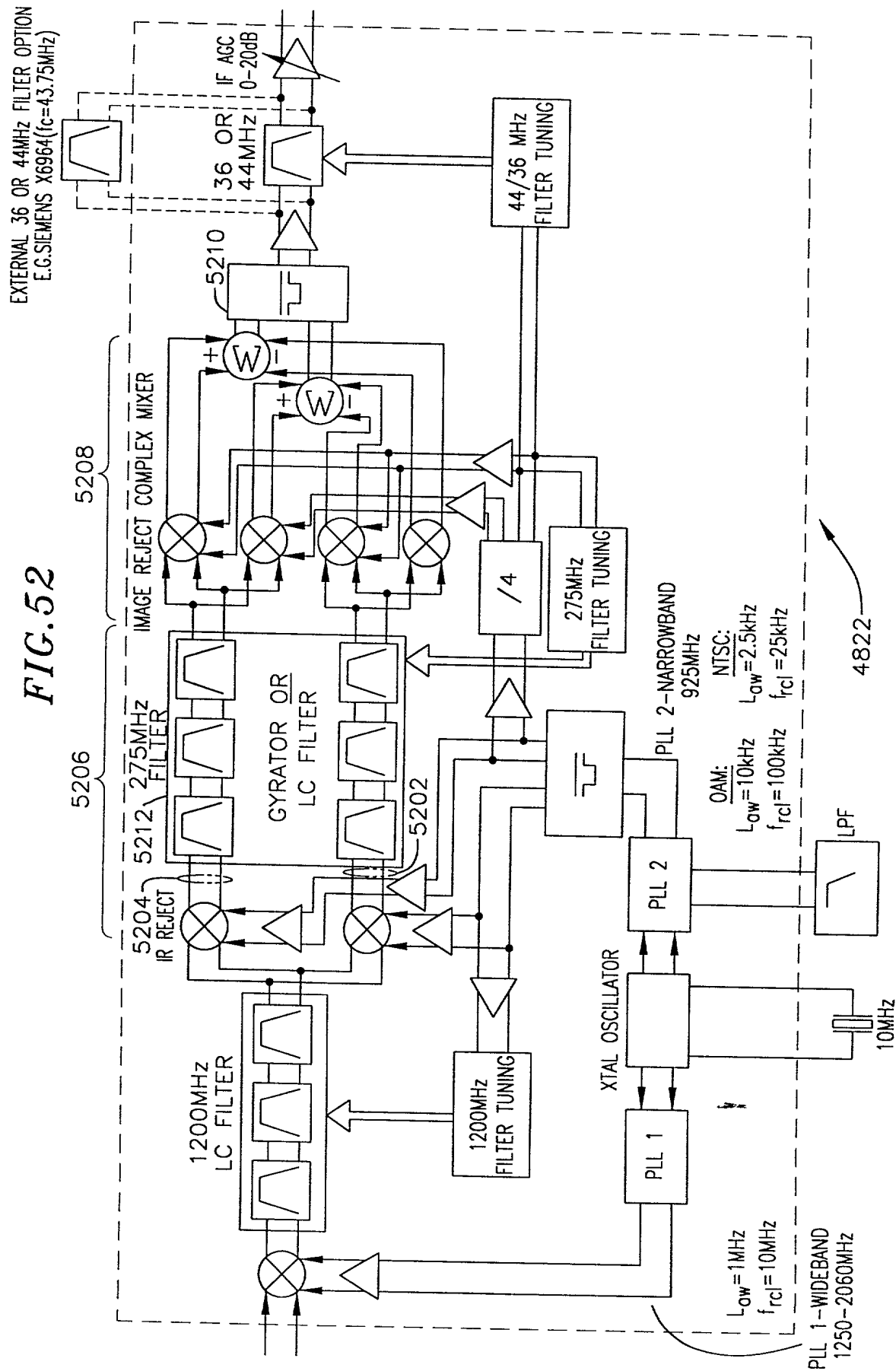


FIG. 52



**FIG.53**  
CATV TUNER

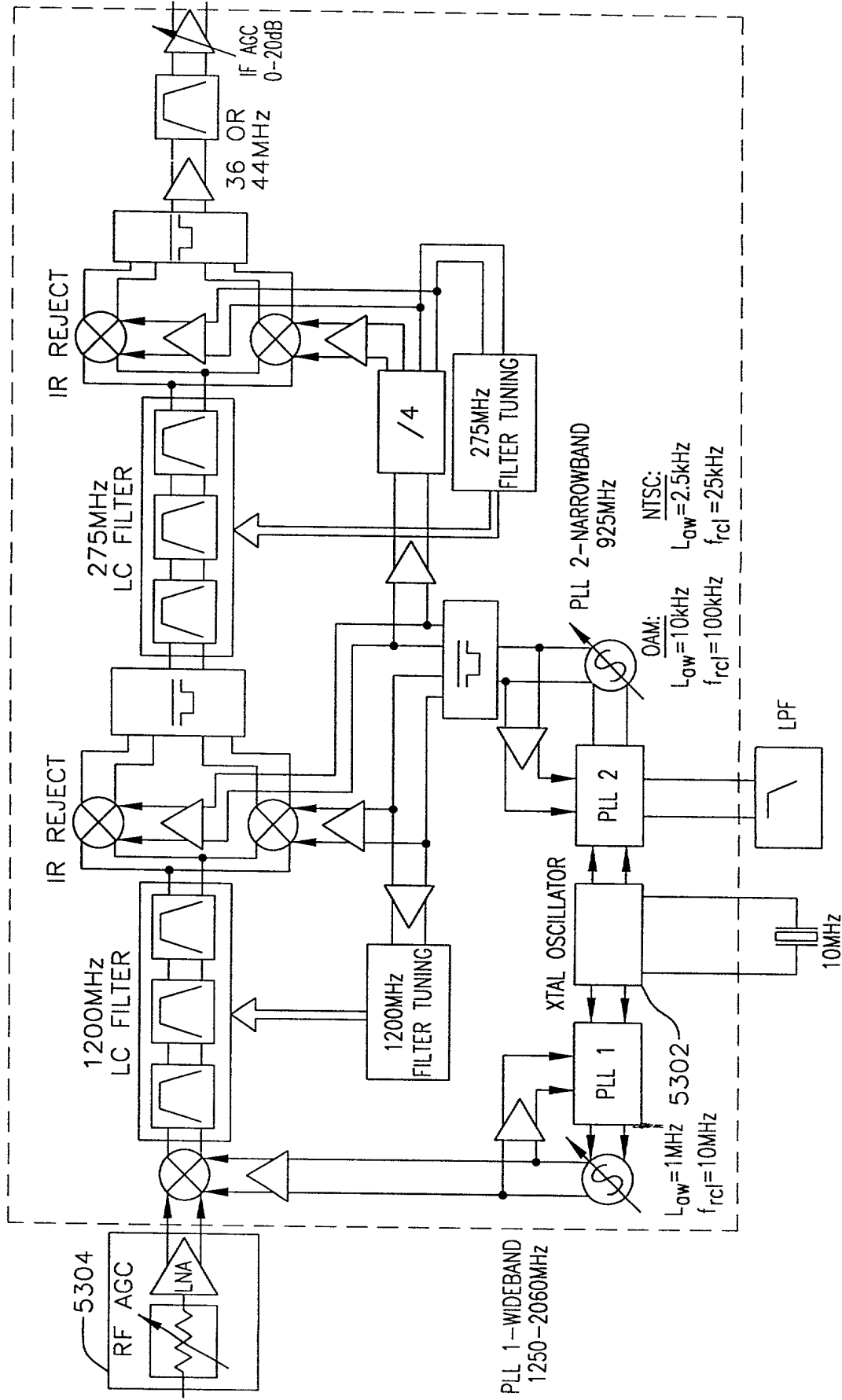
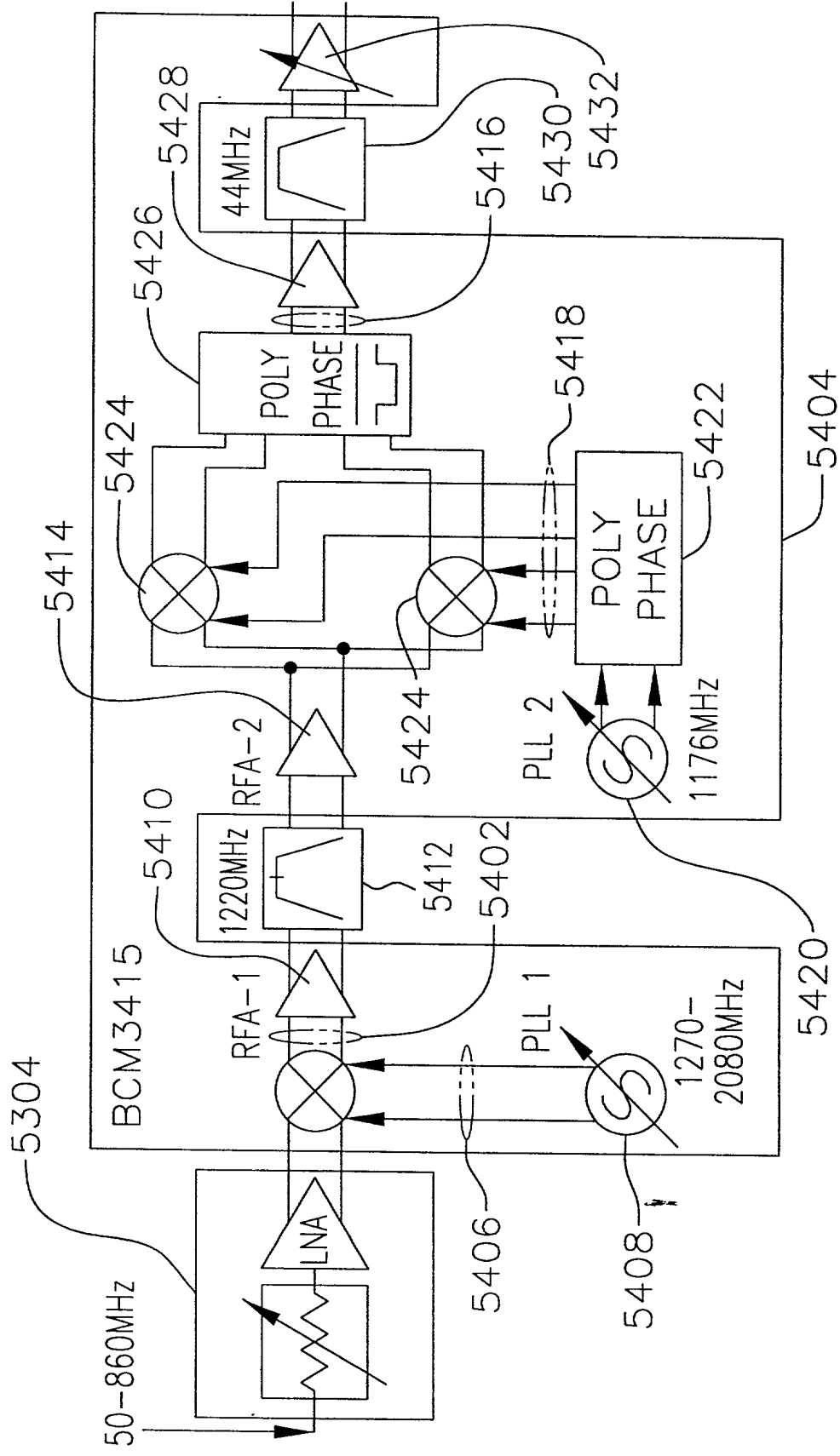


FIG. 54



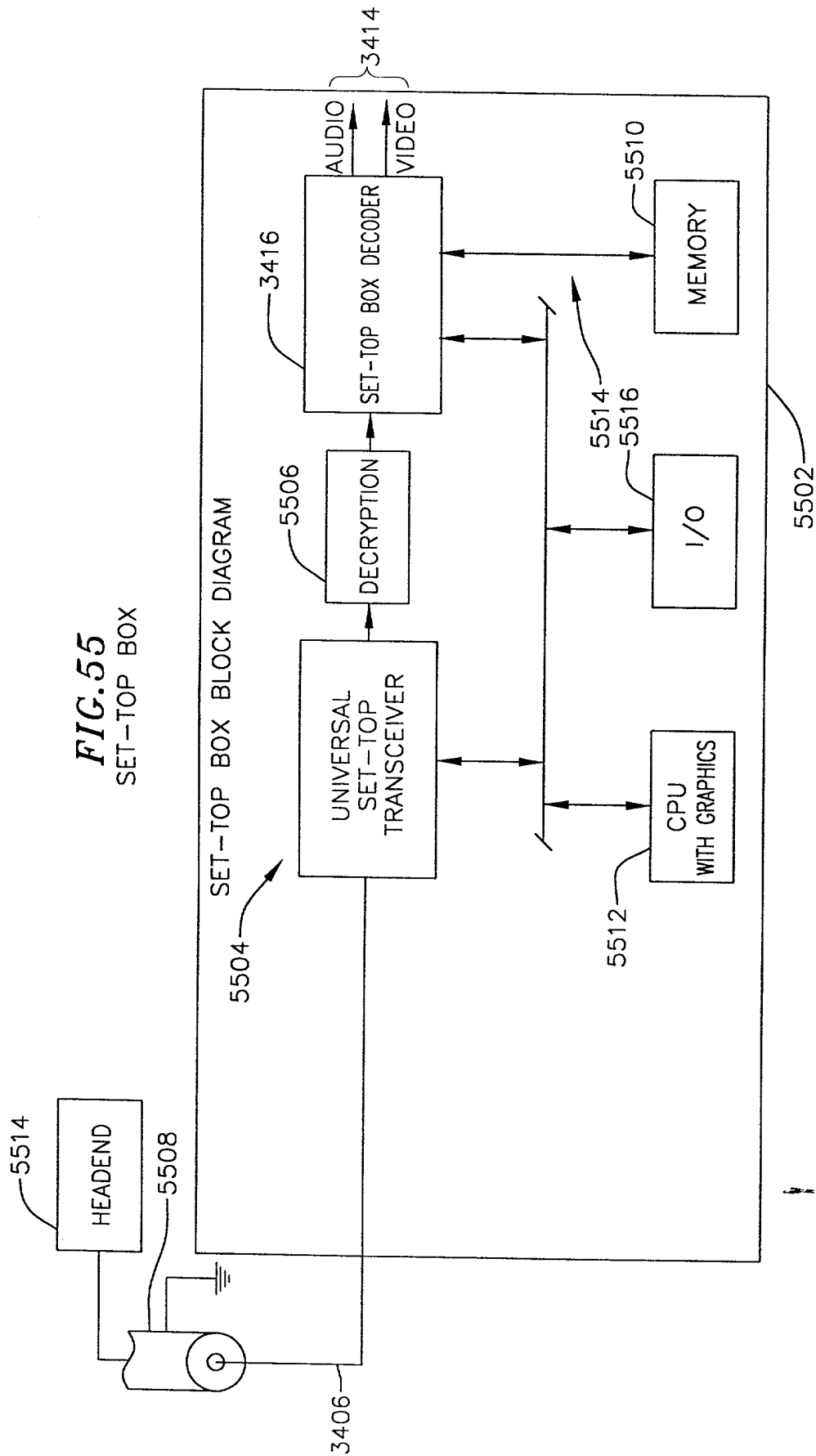
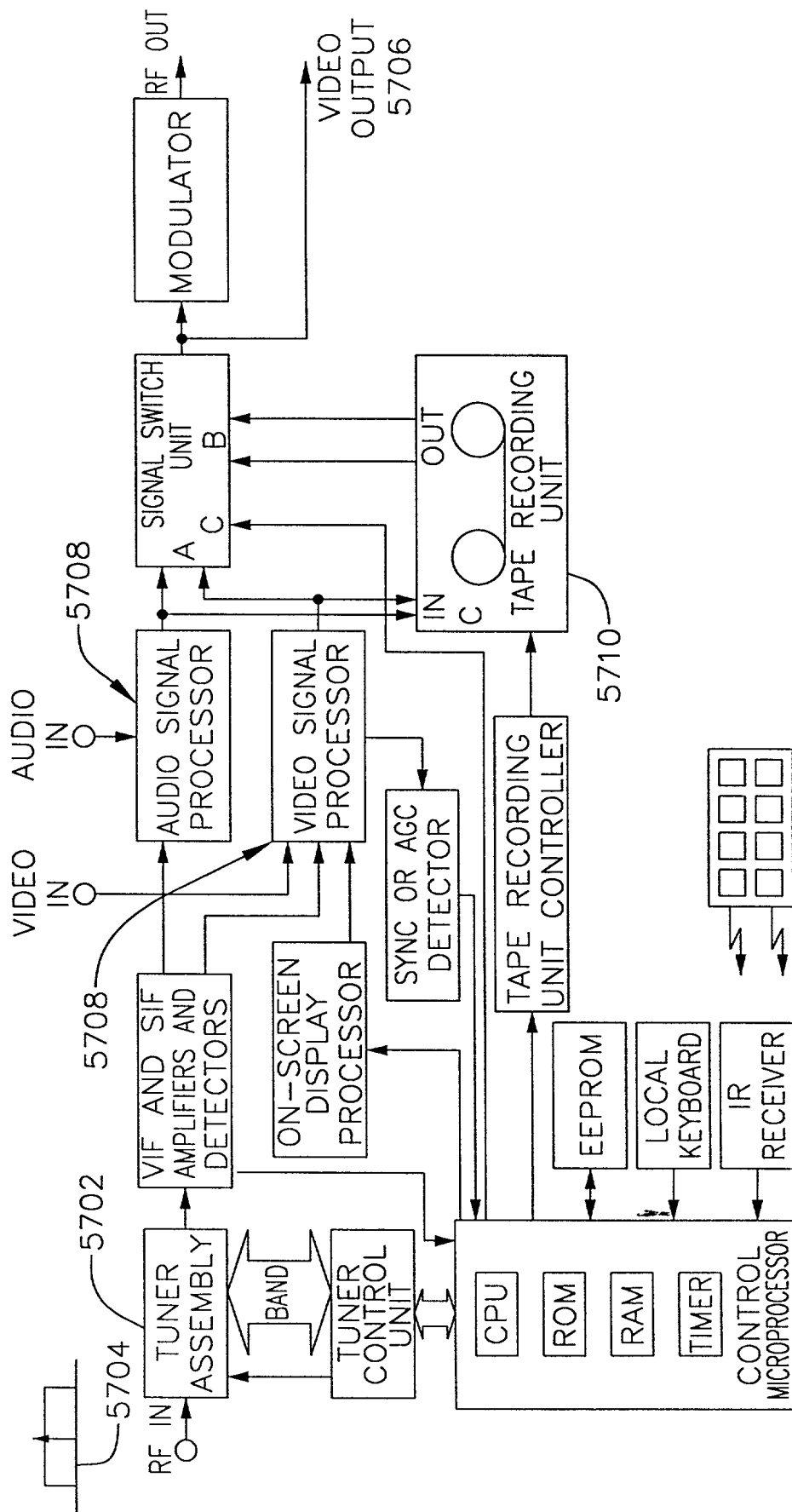






FIG. 57

VCR BLOCK DIAGRAM



**FIG. 58**

